

CALIFORNIA PUBLIC UTILITIES COMMISSION

Reissued Audit Report

CALIFORNIA ADVANCED SERVICES FUND PROGRAM

January 1, 2016, through December 31, 2018



BETTY T. YEE
California State Controller

April 2021



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California State Controller

April 13, 2021

Erika Contreras, Secretary of the Senate
State Capitol, Room 3044
Sacramento, CA 95814

Dear Ms. Contreras:

Pursuant to Public Utilities Code section 912.2(a), the State Controller's Office performed the third interim performance audit of the California Advanced Services Fund (CASF) Program for the period of January 1, 2016, through December 31, 2018.

This reissued report updates our previous report dated March 3, 2018. The transmittal letter of the previous report incorrectly stated that the audit period was January 1, 2016, through June 30, 2018, instead of January 1, 2016, through December 31, 2018. We also added additional detail of the audit procedures performed to the Objective, Scope, and Methodology section of the report. Our conclusion remains the same.

We verified the current status of program operations and progress in implementing legislative requirements. We determined that:

- The California Public Utilities Commission (CPUC) implemented the CASF Program according to state laws and CPUC rules when awarding grants, denying applications, and prioritizing projects; and
- The CASF Program successfully increased deployment of broadband service to all Californians.

However, we found that the CPUC did not follow its internal policies and procedures for awarding CASF Program grants and maintaining appropriate supporting documentation. In addition, expanding the CASF Program's scope would improve the program's likelihood of successfully increasing deployment of broadband services to all Californians. Details are provided in the Findings and Recommendations section of this report.

If you have any questions, please contact Andrew Finlayson, Chief, State Agency Audits Bureau, by telephone at (916) 324-6310, or by email at afinlayson@sco.ca.gov.

Sincerely,

Original signed by

MICHAEL REEVES, CPA
Acting Chief, Division of Audits

MR/as

cc. Rob Osborn, Director
Communications Division
California Public Utilities Commission
Selena Huang, Program Manager
Communications Division
California Public Utilities Commission
Lindsey Tong, Analyst
Communications Division
California Public Utilities Commission
Cindy McReynolds, Analyst
Communications Division
California Public Utilities Commission
Melanie Balfour, Analyst
Communications Division
California Public Utilities Commission
Sue Parker, Chief Clerk
California State Assembly
Amy Leach, Minute Clerk
California State Assembly
Cara L. Jenkins, Legislative Counsel
California Office of Legislative Counsel

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Attachment 1—California Public Utilities Commission’s Response to Draft Audit Report

Attachment 2—2018 Annual Report – California Advanced Services Fund, Issued April 2019

Reissued Audit Report

Summary

Pursuant to Public Utilities Code (PUC) section 912.2(a), the State Controller's Office (SCO) performed the third interim performance audit of the California Advanced Services Fund (CASF) Program for the period of January 1, 2016, through December 31, 2018.

We verified the current status of program operations and progress in implementing legislative requirements. We determined that:

- The California Public Utilities Commission (CPUC) implemented the CASF Program according to state laws and CPUC rules when awarding grants, denying applications, and prioritizing projects; and
- The CASF Program successfully increased deployment of broadband service to all Californians.

However, we determined that the CPUC did not follow its internal policies and procedures for awarding CASF Program grants and maintaining appropriate supporting documentation. In addition, expanding the CASF Program's scope would improve the program's likelihood of successfully increasing deployment of broadband service to all Californians.

Audit Authority

PUC section 912.2(a) requires the CPUC's five-member board (Commission) to conduct interim financial audits and a final financial audit, in addition to interim performance audits and a final performance audit. These audits of the implementation and effectiveness of the CASF are "to ensure that funds have been expended in accordance with the approved terms of the grant awards and loan agreements pursuant to Section 281."

The performance audit was performed by the SCO on behalf of the CPUC. The authority to conduct this audit is given by Interagency Agreement No. 19NS1086, dated February 29, 2020, between the SCO and CPUC, which provides that the SCO conduct the third interim financial audit (Audit of CASF Program Financial Transactions – Revenue and Expenditures) and third interim performance audit(s) of the CASF.

Further authority is provided by Government Code section 12410, which states, in part:

The Controller shall superintend the fiscal concerns of the state. The Controller shall audit all claims against the state, and may audit the disbursement of any state money, for correctness, legality, and for sufficient provisions of law for payment.

Background

The CPUC implemented the CASF Program on December 20, 2007, when it adopted Decision (D.) 07-12-054, in accordance with PUC section 701. The CPUC allocated \$100 million to the program, funded by a 0.25% surcharge on revenues collected from end-users for intrastate telecommunications services, effective January 1, 2008. The CASF

Program provides grants to bridge the “digital divide” in unserved and underserved areas of California.

The CPUC adopted the CASF Program application requirements, timelines, and scoring criteria for parties to qualify for broadband project funding in Resolution T-17143, issued on June 12, 2008. The Legislature reaffirmed the CPUC’s creation of the CASF Program with a program sunset date of January 1, 2013, in Senate Bill 1193, which Governor Schwarzenegger signed on September 27, 2008. The CASF Program is codified in PUC section 281.

The Legislature passed, and the Governor signed into Law, several bills to expand PUC section 281, including:

- SB 1040 (Padilla, Chapter 317, Statutes of 2010) – extended the program indefinitely; increased CASF Program funding to \$225 million; established the Broadband Infrastructure Grant Account (Infrastructure Grant Account), the Rural and Urban Regional Broadband Consortia Grant Account (Consortia Account) and the Broadband Infrastructure Revolving Loan Account (Infrastructure Loan Account); and allocated \$100 million to the Infrastructure Grant Account, \$10 million to the Consortia Account, and \$15 million to the Infrastructure Loan Account;
- SB 740 (Padilla, Chapter 522, Statutes of 2013) – added an additional \$90 million to the Infrastructure Grant Account, increasing total CASF Program funding to \$315 million;
- Assembly Bill 1299 (Bradford, Chapter 507, Statutes of 2013) – established the Broadband Public Housing Account (Public Housing Account), which was funded by reallocating \$20 million from the Infrastructure Grant Account and \$5 million from the Infrastructure Loan Account. Pursuant to AB 1299, any remaining funds not awarded from the Public Housing Account by December 31, 2016, would be returned to the original funding accounts, proportionally;
- AB 1262 (Wood, Chapter 242, Statutes of 2015) – reallocated \$5 million from the Infrastructure Loan Account to the Consortia Account;
- SB 745 (Hueso, Chapter 710, Statutes of 2016) – postponed the date for the return of unused funds from the Public Housing Account to the Infrastructure Grant Account and the Infrastructure Loan Account to December 31, 2020; and
- AB 1665 (Garcia, Chapter 851, Statutes of 2017) – eliminated the Infrastructure Loan Account as of January 1, 2018, and directed that funds remaining in that account be transferred to the Infrastructure Grant Account; extended the Infrastructure Grant Account to include funding to households for line-extension with the aggregate amount of grants awarded not to exceed \$5 million (thus creating the Broadband Line Extension Program); created the Broadband Adoption Account (Adoption Account); and allocated \$300 million to the Broadband Grant Account, \$10 million to the Consortia Account, and \$20 million to the Broadband Adoption Account. The additional \$330 million of funding is to be collected beginning January 1, 2018 and continuing through the 2022 calendar year.

PUC section 281(a) states, in part:

The commission shall develop, implement, and administer the California Advance Services Fund program to encourage deployment of high-quality advanced communications services to all Californians that will promote economic growth, job creation, and the substantial social benefits of advanced information and communications technologies...

Pursuant to PUC section 281(b):

The goal of the program is, no later than December 31, 2022, to approve funding for infrastructure projects that will provide broadband access to no less than 98 percent of California households in each consortia region...

Pursuant to PUC section 281(c), the CASF is allocated to four accounts within the fund, with the following purposes:

- The Infrastructure Grant Account assists in financing the building and/or upgrading of broadband infrastructure in areas that are unserved by existing broadband providers.
- The Consortia Account provides grants to eligible consortia “to facilitate deployment of broadband services by assisting infrastructure applicants in the project development or grant application process.”
- The Public Housing Account provides grants and loans to eligible publicly supported communities, either to finance projects to connect a broadband network to that publicly supported community, or to support programs designed to increase adoption rates of broadband services by residents of that publicly supported community.
- The Adoption Account provides grants to increase publicly available or after-school broadband access and digital inclusion.

The Line Extension Program, which provides funding to households that would otherwise not be able to afford a line extension to the property, is funded through the Broadband Grant Account

PUC section 912.2 (a) requires the CPUC to conduct one interim financial audit and a final financial audit, and one interim performance audit and a final performance audit, of the implementation and effectiveness of the CASF “to ensure that funds have been expended in accordance with the approved terms of the grant awards and loan agreements pursuant to Section 281.”

PUC section 912.2 (a) further requires the CPUC to report its interim findings to the Legislature by April 1, 2020, and to report its final findings to the Legislature by April 1, 2023. The reports must also include “an update to the maps in the final report of the California Broadband Task Force and data on the types and numbers of jobs created as a result of the program.”

The CPUC makes all CASF Program reports available on its website at the following URL:

<https://www.cpuc.ca.gov/General.aspx?id=9226>

The first interim performance audit report, submitted in April 2011, is available at the following URL:

https://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Communications_-_Telecommunications_and_Broadband/Reports_and_Presentations/VolumeIPerformanceAudit.pdf

The second interim performance audit report, submitted in April 2017, is available at the following URL:

<ftp://ftp.cpuc.ca.gov/Telco/CASF/Reports%20and%20Audits/S16CSF0002%20FINAL%20OSBLessAttachment3.pdf>

The CPUC's 2018 Annual Report on the activities conducted by the CASF Program, published in April 2019, is available at the following URL:

https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/About_Us/Organization/Divisions/Office_of_Governmental_Affairs/Legislation/2019/CASF%202018%20Annual%20Report%20April%202019.pdf

The 2018 Annual Report is also included in this report as Attachment 2.

General Information about the Entity

The CPUC's Communications Division performs administrative duties related to the CASF Program, including, but not limited to, reviewing CASF Program grant applications and recommending approval,¹ reviewing grantee progress reports, and approving grantee payment requests. The Communications Division also oversees the Telecommunications and User Fee Filing System for the electronic reporting and remittance of surcharges and user fees due to the CPUC from telecommunications corporations and Voice over Internet Protocol providers.

The CPUC engages interdepartmental and external consulting and professional services including, but not limited to, financial eligibility reviews of loan applications; loan processing and servicing; processing and validation of broadband data collected from California's service providers; expertise related to Geographic Information System mapping for the California Interactive Broadband Map; and environmental reviews in accordance with the California Environmental Quality Act.

Objectives, Scope, and Methodology

We conducted this performance audit of the CASF Program to:

- Verify the current status of program operations, and progress in implementing legislative requirements;
- Determine whether the CPUC implemented the CASF Program

¹ D. 18-06-032 assigns Communications Division staff the task of approving applications that meet certain criteria for expedited review.

according to state laws and CPUC rules when awarding grants, denying applications, and prioritizing projects; and

- Determine whether the CASF Program successfully increased deployment of broadband service to all Californians.

For this third interim performance audit, the scope is from January 1, 2016, through December 31, 2018.

The CASF Program is reported to the Legislature on a calendar-year basis. The 2018 Annual Report – California Advanced Services Fund (2018 Annual Report) was issued in April 2019. The report covers the period of January 1, 2018, through December 31, 2018.

The 2018 Annual Report covers the scope period of this audit and contains the cumulative totals necessary to meet the objectives of this audit. Therefore, we determined that the audit methodology should be applied only to the data contained in the 2018 Annual Report.

Figure 1 summarizes the grants authorized and awarded since inception of the CASF Program, as reported in the 2018 Annual Report.

Figure 1

CASF Grants Awarded as of December 31, 2018

Account	Amount Authorized Since Inception	Amount Awarded Since Inception
Infrastructure Grant	\$ 565,000,000	\$ 236,184,034
Consortia	25,000,000	12,549,852
Public Housing	25,000,000	14,357,085
Adoption	25,000,000	2,605,647
Total	\$ 640,000,000	\$ 265,696,618

The CPUC's Utility Audit, Finance, and Compliance Bureau (UAFCB) issued the first interim independent performance audit of the CASF for the period of January 1, 2008, through December 30, 2010, Issued April 2011. The report concluded that CASF Program funds were expended in compliance with PUC sections 281 and 282, other state laws, and CPUC directives.

As the 2018 Annual Report's audit population includes transactions that were also included in UAFCB's report and in SCO's second interim performance audit report for the period of January 1, 2008, through December 31, 2015, we accepted UAFCB's conclusion that those balances meet the audit objective for the first interim period.

During this audit, we reviewed contracts awarded between January 1, 2016, and December 31, 2018. We assessed the implementation and effectiveness of the CASF to ensure that funds were expended in accordance with the approved terms of the grant awards and loan agreements. We also reviewed data, if available, on the types and numbers

of jobs created as a result of CASF Program projects. The audit covered the following accounts:

- The Infrastructure Grant Account;
- The Infrastructure Loan Account;
- The Consortia Account;
- The Public Housing Account; and
- The Adoption Account.

To achieve our audit objectives, we:

- Reviewed three successful grant applications in each CASF grant account, and confirmed that CPUC staff made recommendations in accordance with PUC section 281, other state laws, and CPUC directives. Provided process improvements, when identified;
- Reviewed progress reports, payment invoices, and completion reports for grant awards in addition to communications with CPUC staff and management to confirm that CPUC oversight was in accordance with PUC sections 281, 282, and 912.2(a), other state laws, and CPUC directives. Provided process improvements, when identified;
- Analyzed transactions during the Audit of Financial Transactions; Revenue and Expenditures to confirm that CASF Program funds were expended in accordance with the approved terms of the grant awards and loan agreements, and to confirm that the CASF Program increased deployment of broadband service consistent with PUC section 281;
- Reviewed survey data on the types and numbers of jobs created, both direct and indirect, and other indicators of economic growth. Considered the contributions to broadband deployment made by recipients of grants and loans from each CASF account, and determined whether certain awardees or accounts made no substantial contribution;
- Conducted inquiries, interviews, and surveys of sample communities, City Councils, etc and submitted data requests to gain an understanding of whether the approved CASF Program projects helped promote economic growth, job creation, and the social benefits of advanced information and communications technologies; and
- Assessed CPUC's internal controls related to the CASF Program by reviewing policies and procedures, guidelines, grant agreements, contracts, expenditure reports and supporting documents. We reviewed the following internal control components and principles that are significant to the audit objectives:
 - Control Environment
 - The oversight body and management should demonstrate a commitment to integrity and ethical values.
 - The oversight body should oversee the entity's internal control system.
 - Management should establish an organizational structure, assign responsibility, and delegate authority to achieve the

- entity's objectives.
- Management should demonstrate a commitment to recruit, develop, and retain competent individuals.
- Management should evaluate performance and hold individuals accountable for their internal control responsibilities.
- Risk Assessment
 - Management should define objectives clearly to enable the identification of risks and define risk tolerances.
 - Management should identify, analyze, and respond to risks related to achieving the defined objectives.
 - Management should consider the potential for fraud when identifying, analyzing, and responding to risks.
 - Management should identify, analyze, and respond to significant changes that could impact the internal control system.
- Control Activities
 - Management should design control activities to achieve objectives and respond to risks.
 - Management should design the entity's information system and related control activities to achieve objectives and respond to risks.
 - Management should implement control activities through policies.
- Information and Communication
 - Management should use quality information to achieve the entity's objectives.
 - Management should internally communicate the necessary quality information to achieve the entity's objectives.
 - Management should externally communicate the necessary quality information to achieve the entity's objectives.
- Monitoring
 - Management should establish and operate monitoring activities to monitor the internal control system and evaluate the results.
 - Management should remediate identified internal control deficiencies on a timely basis.
- Conducted limited tests of those controls deemed significant to the audit objective in order to determine whether the controls were functioning as intended; and whether CPUC was in compliance with written internal policies and procedures, and applicable provisions of laws, regulations, and established criteria;
- Tested a non-statistical (judgmental) sample of transactions associated with project expenditures from the Infrastructure Grant Account,

Consortia Account, Public Housing Account, and Adoption Account; and traced those transactions to supporting documentation, as summarized in Figure 2;

Figure 2

CASF Grants Awarded, CY 2016–CY 2018

<u>Account</u>	<u>Grants Awarded</u>	<u>Amount Awarded</u>	<u>Grants Sampled</u>	<u>Amount Sampled</u>
Infrastructure Grant	16	\$ 115,593,967	3	\$ 7,838,642
Consortia	17	4,651,634	3	797,500
Public Housing	335	10,726,711	3	143,850
Adoption	48	2,714,229	3	142,323
Total	416	\$ 133,686,541	12	\$ 8,922,315

- Reviewed and analyzed the CPUC’s process for awarding the grant awards reported in the CASF Program annual reports since CY 2008, as shown in Figure 3. Judgmentally selected a non-statistical sample of grant awards and performed limited tests of controls to confirm and validate that documented processes and procedures were functioning as designed;

Figure 3

Remaining Balance of CASF Grants to be Awarded

<u>Account</u>	<u>Amount Authorized</u>	<u>Amount Awarded</u>	<u>Balance to be Awarded</u>
	<u>Since Inception</u>	<u>Since Inception</u>	
Infrastructure Grant	\$ 565,000,000	\$ 236,184,034	\$ 328,815,966
Consortia	25,000,000	12,549,852	\$ 12,450,148
Public Housing	25,000,000	14,357,085	\$ 10,642,915
Adoption	25,000,000	2,605,647	\$ 22,394,353
Total	\$ 640,000,000	\$ 265,696,618	\$ 374,303,382

- Tested the California State Accounting and Reporting System to ensure that the system can identify Program Cost Account codes related to revenues and expenditures, as indicated by the CPUC’s written policies and procedures and internal control interviews;
- Tested the same targeted selection to determine whether the amounts claimed were adequately supported and in compliance with PUC sections 281 and 282, other state laws, and CPUC directives;
- Reviewed authorized grants not yet awarded; as of December 31, 2018, a balance of \$374,303,382 has not been awarded.

We did not audit CPUC’s financial statements. We limited our audit scope to planning and performing audit procedures necessary to achieve our audit objective. In addition, our review of internal control was limited to gaining an understanding of the transaction flows and financial-management accounting system, and performing limited tests of controls regarding CASF’s ability to accumulate and segregate reasonable and allowable program costs.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Conclusion

During our audit, we verified the current status of program operations and progress in implementing legislative requirements. We determined that:

- The CPUC implemented the CASF Program according to state laws and CPUC rules when awarding grants, denying applications, and prioritizing projects; and
- The CASF Program successfully increased deployment of broadband service to all Californians.

However, we found that the CPUC did not follow its internal policies and procedures for awarding CASF Program grants and maintaining appropriate supporting documentation. In addition, expanding the CASF Program's scope would improve the program's likelihood of successfully increasing deployment of broadband services to all Californians. Details are provided in the Findings and Recommendations section of this report.

Follow-up on Prior Audit Findings

The CPUC has satisfactorily resolved the findings noted in our prior audit report for the period of July 1, 2010, through December 31, 2015, issued on March 30, 2017.

Views of Responsible Officials

We issued a draft report on December 1, 2020. Robert Osborn, Director, Communications Division, responded by letter dated December 10, 2020 (Attachment 1), disagreeing with Finding 1 and partially agreeing with Finding 2, and indicating that the Communications Division has taken steps to correct the deficiency noted. We will follow up during the next CASF audit to verify that these corrective actions were adequate and appropriate.

Reason for Reissuance

This report has been reissued to correct the audit period in the transmittal letter from January 1, 2016, through June 30, 2018, to January 1, 2016, through December 31, 2018. We also added additional detail of the audit procedures performed to the Objective, Scope, and Methodology section. Our conclusion remains the same.

Restricted Use

This report completed the legislatively required third interim performance audit and is solely for the information and use of the CPUC, the California State Legislature, and the SCO. It is not intended to be and should not be used by anyone other than these specified parties. This restriction is not intended to limit distribution of this audit report, which is a matter of public record, and is available on the SCO website at www.sco.ca.gov.

Original signed by

MICHAEL REEVES, CPA
Acting Chief, Division of Audits

April 13, 2021

Findings and Recommendations

FINDING 1— CPUC did not follow internal policies and procedures

The CPUC did not follow its internal policies and procedures for awarding CASF Program grants and maintaining appropriate supporting documentation.

We reviewed 12 of the 416 contracts awarded and found that the scoring sheet for one awarded grant from the Consortia Account did not appear to meet the threshold for approval. In addition, the scoring sheet was incomplete. Communications Division representatives stated that the documentation used to make the final decision to award the contract may have been misplaced during a system transition. Due to this lack of supporting documentation, we cannot make a determination on whether this grant adequately and effectively fulfills the CASF Program's stated goals.

We determined that this instance does not represent a significant internal control deficiency. However, the lack of supporting documentation could indicate a reasonable possibility that noncompliance with policies and procedures, provisions of laws, or regulations will not be prevented, or detected and corrected, on a timely basis.

Government Code section 13401 (a) states, in part:

- (3) Effective systems of internal control provide the basic foundation upon which a structure of public accountability must be built.
- (4) Effective systems of internal control are necessary to ensure that state resources are adequately safeguarded, monitored, and administered.
- (5) Systems of internal control are necessarily dynamic and must be routinely monitored, continuously evaluated, and, where necessary, improved.

Pursuant to Government Code section 13401 (b) (1) "Each state agency must maintain effective systems of internal control as an integral part of its management practices."

Recommendation

We recommend that the CPUC:

- Ensure that internal controls over contract awarding are functioning as intended; and
- Follow its own policies and procedures for documenting and awarding grants, to ensure that all awarded grants meet the threshold for approval and are documented as such.

CPUC's Response

CD [Communications Division] disagrees with SCO's finding that the CPUC did not follow its internal controls and stated policies and procedures in regards to awarding CASF Program grants and maintaining appropriate supporting documentation of CASF Program grant awards. Furthermore, CD disagrees with SCO's assessment that

the lack of documentation could indicate a reasonable possibility that noncompliance with policies and procedures, provisions of laws, or regulations will not be prevented, or detected and corrected, on a timely basis to the overall program. SCO's finding was based on a single misplaced Consortia Account scoring sheet for Gold Country Broadband Consortium (GCBC). The CASF Consortia Account has Administrative Manuals and policies and procedures in place for documenting and awarding grant awards to ensure all awarded grants meet the threshold for approval and are documented as such. The documentation for the Consortia Account score sheets were complete overall. The GCBC met the threshold for approval and the scoring sheet was completed, which is demonstrated because the grant was approved in Resolution T-17538 with other consortia grants. Specifically, page 8 of Resolution T-17538 states that GCBC scored at least 70 of 100 points with clear and detailed proposals. It appears likely that the missing/incomplete score sheet was due to a problem with the fileserver that stored the program documentation. In June 2019, CD discovered that some files in the CASF fileserver were either deleted or missing. CD has since worked with ITSD [Information Technology Services Division] to resolve the issue and restore files. Specifically, CD has addressed the file storage issue and has implemented a new system that backs up all CASF Account files. Per ITSD, it is currently backing up all servers, databases, and files using a newly implemented Rubrik technology to address shortfalls in previous backup and restore capabilities. The Rubrik technology is the Commission's new standard as of December 2019 that was purchased to protect the enterprise environment. It is currently in place and functioning. In addition, all program documentation is now stored in Commission-provided secure systems.

SCO Comment

Our finding and recommendation remain unchanged.

The SCO understands that certain files and documentation may have been misplaced. It is possible that, under normal non-Covid-19 circumstances, such documentation would have been found or recovered.

The SCO determined that this is an internal control finding because the documentation was not readily available. The Communications Division should ensure that such processes exist because the performance measures of these contracts are subjective in nature. Past contractors have been subject to litigation; therefore, it is important to ensure that controls are in place.

FINDING 2— Expanding CASF Program scope would improve the likelihood of achieving program goals

Expanding the CASF Program's scope would improve the program's likelihood of successfully increasing deployment of broadband services to all Californians. The CASF Program's stated goal is to provide broadband access to no less than 98% of California households in each consortia region by December 31, 2022. The 2018 Annual Report showed that few unserved areas remain. However, it may not be economically feasible to deploy broadband to the remaining unserved areas. In addition, the number of grant applications has been declining steadily, as have the number of projects that meet CASF Program goals as stated.

CPUC D. 07-12-054 defines an *unserved* area as “any service region in which no facilities-based provider offers any level of broadband service such that internet connectivity can only be achieved through dial-up service.” CPUC D. 07-12-054 defines an *underserved* area as one in which “in which no facilities-based provider offers broadband service at the benchmark transmission speeds of at least 3 [MBPS] upload and 1 MBPS download.” PUC section 281 (b) defines an “unserved household” as one “for which no facility-based broadband provider offers broadband service at speeds of at least 6 megabits per second (mbps) downstream and one mbps upstream.” As noted in the 2018 Annual Report, the definition of “underserved” was changed to “unserved-slow-service” to conform to current statute.

At present, few unserved areas remain. The 2018 Annual Report shows that as of December 31, 2017, 96.5% of households in each consortia region of California had broadband speeds of at least 6 MBPS/1MPBS. However, it may not be economically feasible to reach all households in California that are still unserved or unserved-slow-service.

Of the unserved households, 59.3% are urban and 40.7% are rural. Although there are fewer unserved households in rural areas, the costs of deploying broadband in rural areas may be disproportionately higher due to difficult terrain and distance from provider facilities. One project noted in the 2018 Annual Report will provide wireline (DSL, cable modem, and fiber to the home) access to 458 unserved households, at an average cost of \$16,784.

Project costs also depend on the technology used to provide connections. As noted in the 2018 Annual Report, one project will provide fixed wireless access (via radio signals from cellular towers) to 1,537 unserved households at a projected cost of \$742 per household. Another project will use abandoned hybrid fiber-coaxial infrastructure to provide broadband internet service to 5,480 unserved households at a projected cost of \$93 per household.

Our audit found that the number of applications each year has been declining consistently since 2008. The decline in applications coincides with an increase in CASF Program revenue being collected. Although the CASF Program has occasionally experienced reduced ability to collect revenue, it has been able to accumulate more revenue than existing projects are able to expend. In addition, the list of programs that meet CASF Program goals as stated are both decreasing and becoming more economically unfeasible for grantees. These conditions may provide an opportunity for wasteful or inefficient spending of CASF Program resources.

The difference between current available technologies and those available when the CASF Program was established is vast. The regulatory environment has also changed significantly. Communications Division staff members are applying policies as stated at program inception, and procedures as currently stated. As a result, the adequacy and effectiveness of the CASF Program policies and procedures is limited by technological and regulatory constraints.

Pursuant to Section 3 (a) of the Internet For All Now Act (Chapter 851 of the Statutes of 2017):

The commission shall develop, implement, and administer the California Advanced Services Fund program to encourage deployment of high-quality advanced communications services to all Californians that will promote economic growth, job creation, and the substantial social benefits of advanced information and communications technologies, consistent with this section and with the statements of intent in Section 2 of the Internet For All Now Act.

During the audit, we were aware of pending and potential legislation that could affect the CPUC's ability to improve the program's performance measures. There were no effects during our scope period, nor were they measureable during fieldwork. However, such legislation could affect future improvement of the program's performance. This situation will be followed up on in subsequent audits.

Recommendation

We recommend that the CPUC:

- Initiate a cost/benefit analysis of deploying broadband access to the remaining unserved areas;
- Determine how economically feasible it would be for grantees to complete broadband projects in unserved areas;
- Consider whether awarding grants only to projects that do not use outdated or abandoned technologies and infrastructures would make better use of program funds; and
- Expand the program scope to include emerging technologies (for example, 5G) to improve the CASF Program's likelihood of successfully increasing deployment of broadband service to 98% of California households in each consortia region.

CPUC's Response

CD agrees that broadening the CASF scope would improve the likelihood of achieving program goals. In addition to changes enacted by legislation, the CPUC has and continues to engage stakeholders in its efforts to broaden the scope, improve the program and processes based on lessons learned with each application cycle.

Regarding the [number] of applications received, CD notes that the [number] of applications declined consistently during the program's inception and during the time period of this audit (January 1, 2016, through December 31, 2018). The decline was probably for the following three reasons.

First, the CASF Program has many rules and requirements and the initial application and challenge processes, where incumbent carriers can block applicants if they claim to serve the area now or in the future, were cumbersome and often delayed the process.

Second, large providers did not apply for CASF. Historically, Rural and Competitive Local Exchange Carriers were the providers applying for

CASF grant money.

Third, on October 15, 2017, the Governor signed Assembly Bill (AB) 1665 (Chapter 851, Statutes of 2017) into law. This urgency legislation amended the statutes governing the CASF Program. For example, CASF eligible areas were changed significantly: the “underserved” designation was eliminated, designating more of the state as “unserved,” and the speed threshold for eligible areas was lowered. Significant parts of the state eligible for Connect America Fund Phase II (CAF II) funding were also deemed ineligible. The most constraining restriction of the statute was that it severely limited the entities who could apply for funding for the first two years in an attempt to leverage federal funding. Taken together, this reduced the number of areas eligible for CASF infrastructure grants and, hence, the number of Infrastructure Account applications the Commission has received.

[The number of applications is no longer in decline.] On May 4, 2020, CD received 54 applications requesting approximately \$533 million in total funding from the Infrastructure Grant Account.

The increase in applications was probably due to changes in program rules and legislation. In Decision (D.)18-12-018, the CPUC simplified and streamlined the CASF Infrastructure application and approval processes. A yearly application window was instituted (applications were no longer received on a rolling basis) and the project challenge period was limited to 21 days after project posting. Furthermore, the significant increase in the 2020 application cycle was likely due to the expiration of the AB 1665 restrictions on awarding CASF grants in census blocks where a facilities-based service provider had accepted federal funding from the CAF II.

Additionally, Assembly Bill 82, enacted June 29, 2020, may contribute to an increase in the number of applications received in the 2021 application cycle, as it amended Pub. Util. Code section 281 to allow applicants to stack federal funding on top of CASF funding to supplement broadband infrastructure deployment.

CD disagrees with SCO’s statement that, “The decline in applications coincides with an increase in CASF Program revenue being collected. Although the CASF Program has reduced the amount of revenue collected in prior years, it has been able to accumulate more revenue than existing projects are able to expend.” The requested amount of funding in the May 4, 2020 application cycle is more than twice the balance of the remaining CASF funds. Therefore, not all proposed projects will be funded even if all CASF rules and requirements are met. Further, even if all 54 applications from the May 4, 2020 application cycle met CASF rules and requirements, there would not be a guarantee that the goal of the program would be met.

CD disagrees that the existing program “may provide an opportunity for wasteful or inefficient spending of CASF Program resources.” As explained in the 2019 CASF Annual Reports, the CPUC has awarded 77 broadband infrastructure projects [from] the beginning of the program in 2008 through December 31, 2019. The 77 projects include last-mile, hybrid, and middle-mile projects that provide (or will provide) broadband access to [an estimated] 320,734 potential households. Additionally, given the sheer geographic size of the state of California and the challenge of providing broadband service to rural and sparsely populated areas, it is estimated that it would take up to \$6 billion to

provide broadband to every household in the state; the current CASF amount earmarked for this program is only \$565 million, a mere 9.4 percent of the required amount.

CD responds to the statement that “the adequacy and effectiveness of the CASF Program policies and procedures is limited by technological and regulatory constraints.” Currently, there are no statutory or programmatic rules that prohibit the incorporation of future technologies such as Fixed Wireless 5G; and CD has received one application for a 5G-like broadband infrastructure deployment that is under consideration.

The following are CD’s responses to SCO’s recommendations related to Finding #2:

1. “Initiate a cost/benefit analysis of deploying broadband access to the remaining unserved areas.”

CD agrees with this recommendation and believes that a new priority study would be of value and an important element of R.20-08-021. Resolution T-17443, adopted on June 26, 2014, cited areas in California that various CASF-funded regional consortia groups and state agencies have identified as priorities for broadband infrastructure deployment. This information was beneficial to help service providers identify underserved areas and several CASF projects were awarded in these priority areas. However, the CASF Program awards grants rather than [building] networks. Because of this, cost information on broadband deployment for specific areas of the state and their expected value has been limited to average historical data gathered from past grant awards. A more granular level of analysis on an area basis would require additional staffing resources and expertise.

2. “Determine how economically feasible it would be for grantees to complete broadband projects in unserved areas”

As mentioned previously, CASF analysts are not engaged in feasibility studies for building networks, but rather are focused on providing monetary grants to applicants. While the CASF fund mitigates the capital cost of building networks in unserved areas, the economic feasibility calculation, and therefore the risk of maintaining that network and realizing profitable rates and rates of return, are the responsibility of the applicant. A grantee’s cost for building a network is variable—heavily dependent on the technology (FTTH, Hybrid-fiber cable, fixed wireless) balanced against the number of residents and businesses subscribing to the network (take rate). Also, unserved areas are not comparable across the state; in exurban areas just beyond a city’s suburb, the cost per home to [provide] broadband may be less than [in] a sparsely populated rural area. The goal of CASF is precisely to fund these areas which do not meet the feasibility standard and therefore would not [be served] without subsidization.

3. “Consider whether awarding grants only to projects that do not use outdated or abandoned technologies and infrastructures would make better use of program funds.”

The CASF Program’s statute requires that the program be technology-neutral, and also has a very low build out minimum of 10/1 Mbps. This limits the ability of the Commission to exclude applications using antiquated services, such as DSL, or lower quality fixed wireless services that do not provide “future-proof” served speeds. This does not preclude

emerging technologies such as 5G. Staff is currently reviewing one 2020 CASF application which would fund 5G technology deployment.

4. "Expand the program scope to include emerging technologies (for example, 5G) to improve the CASF Program's likelihood of successfully increasing deployment of broadband service to 98% of California households in each consortia region."

As noted [in our response to] recommendation #3, the CASF Program is technology neutral [and] does not preclude emerging technologies such as 5G.

SCO Comment

Our finding and recommendation remain unchanged.

The CASF program is ongoing and reported on a cumulative basis. We understand that actions during the scope period do not necessarily produce auditable results during the same scope period; and that such actions may have positive results in future periods. Therefore, an audit can only review historical performance, and is a not predictor of future results. This is a bi-annual audit: the effects of the subsequent events will be reviewed during subsequent audits, not as a follow-up to this audit. The finding was written to document our conclusions based on the information audited and provided during the audit.

Although we agree that the CPUC has been able to vet more contracts after our scope period, the effect of these contracts is not yet measurable and must be reviewed in future audits.

We understand that events occurring after we conducted the audit may affect the future relevance of our recommendation. However, we believe that this recommendation is appropriate for the audit period. If the circumstances that created the finding are unchanged after the audit period, then CPUC should take corrective actions.

This finding is similar, but not identical, to the finding in the previous audit. The CASF Program is not an early adopter of technology, which limits the program's ability to adapt and to implement appropriate performance metrics. Although this is not CD's fault, as the division can only execute the program at the direction of the Commission, efforts to be proactive would greatly increase the program's effectiveness.

We did not determine that wasteful spending is occurring. However, as noted, the gap between evolving technology and static program criteria could lead to engagement in CASF Program projects that are outdated before they are implemented.

We recognize that additional information may have developed under normal non-Covid 19 circumstances. We documented our conclusions with the understanding that the CPUC could propose corrective actions in its response; and that the effectiveness of such corrective actions would be followed up in future audits.

**Attachment 1—
California Public Utilities Commission’s
Response to Draft Audit Report**

STATE OF CALIFORNIA

Gavin Newsom, Governor

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3288

December 10, 2020

Andrew Finlayson
Chief, State Agency Audits Bureau
State Controller's Office
Division of Audits
Post Office Box 94285
Sacramento, California 94250
Afinlayson@sco.ca.gov

Subject: Communications Division Response to the State Controller's Office Draft CASF Performance Audit Report

Dear Mr. Finlayson,

The Communications Division (CD) appreciates this opportunity to respond to the Draft California Advanced Services Fund (CASF) third independent interim performance audit report prepared by the State Controller's Office (SCO) and distributed for CD's response on December 1, 2020. This audit was initiated pursuant to Public Utilities (Pub. Util.) Code section 912.2(a) on the implementation and effectiveness of the CASF, and to ensure that funds have been expended in accordance with the approved terms of the grant awards pursuant to Pub. Util. Code section 281. CD is pleased to see SCO's determination and conclusion that "CPUC staff implemented the CASF Program accordingly to state laws and CPUC rules when awarding grants, denying applications, and prioritizing projects; and the CASF Program successfully increased deployment of broadband service to all Californians." We interpret these audit report findings to confirm that the CPUC has continued to administer and implement the CASF program pursuant to statutory requirements. The following are CD's responses to individual audit findings.

Finding 1: CPUC did not follow internal policies and procedures.

Response: CD disagrees with SCO's finding that the CPUC did not follow its internal controls and stated policies and procedures in regards to awarding CASF program grants and maintaining appropriate supporting documentation of CASF Program grant awards. Furthermore, CD disagrees with SCO's assessment that the lack of documentation could indicate a reasonable possibility that noncompliance with policies and procedures, provisions of laws, or regulations will not be prevented, or detected and corrected, on a timely basis to the overall program. SCO's finding was based on a single misplaced Consortia Account scoring sheet for Gold Country Broadband Consortium (GCBC). The CASF Consortia Account has Administrative Manuals and policies and procedures in place for documenting and awarding grant awards to ensure all awarded grants meet the threshold for approval and are documented as such. The documentation for the Consortia Account score sheets were complete overall. The GCBC met the threshold for approval and the scoring sheet was completed, which is demonstrated because the grant was approved in Resolution T-17538 with other consortia grants. Specifically, page 8 of Resolution T-17538 states that GCBC scored at least 70 of 100 points with clear and detailed proposals. It appears likely that the missing/incomplete score sheet was due to a problem with the fileserver that stored the program documentation. In June 2019, CD discovered that some files in the CASF fileserver were either deleted or missing. CD has since worked with ITSD to resolve the issue and restore files. Specifically, CD has addressed the file storage issue and has implemented a new system that backs

up all CASF Account files. Per ITSD, it is currently backing up all servers, databases, and files using a newly implemented Rubrik technology to address shortfalls in previous backup and restore capabilities. The Rubrik technology is the Commission's new standard as of December 2019 that was purchased to protect the enterprise environment. It is currently in place and functioning. In addition, all program documentation is now stored in Commission-provided secure systems.

Finding 2: Expanding CASF Program scope would improve the likelihood of achieving program goals.

Response:

CD agrees that broadening the CASF scope would improve the likelihood of achieving program goals. In addition to changes enacted by legislation, the CPUC has and continues to engage stakeholders in its efforts to broaden the scope, improve the program and processes based on lessons learned with each application cycle.

Regarding the amount of applications received, CD notes that the amount of applications declined consistently during the program's inception and during the time period of this audit (January 1, 2016 through December 31, 2018). The decline was probably for the following three reasons.

First, the CASF program has many rules and requirements and the initial application and challenge processes, where incumbent carriers can block applicants if they claim to serve the area now or in the future, were cumbersome and often delayed the process.

Second, large providers did not apply for CASF. Historically, Rural and Competitive Local Exchange Carriers were the providers applying for CASF grant money.

Third, on October 15, 2017, the Governor signed Assembly Bill (AB) 1665 (Chapter 851, Statutes of 2017) into law. This urgency legislation amended the statutes governing the CASF program. For example, CASF eligible areas were changed significantly: the "underserved" designation was eliminated, designating more of the state as "unserved," and the speed threshold for eligible areas was lowered. Significant parts of the state eligible for Connect America Fund Phase II (CAF II) funding were also deemed ineligible. The most constraining restriction of the statute was that it severely limited the entities who could apply for funding for the first two years in an attempt to leverage federal funding. Taken together, this reduced the number of areas eligible for CASF infrastructure grants and, hence, the number of Infrastructure Account applications the Commission has received.

The application decline is no longer the case. On May 4, 2020, CD received 54 applications requesting approximately \$533 million in total funding from the Infrastructure Grant Account.

The increase in applications was probably due to changes in program rules and legislation. In Decision (D.)18-12-018, the CPUC simplified and streamlined the CASF Infrastructure application and approval processes. A yearly application window was instituted (applications were no longer received on a rolling basis) and the project challenge period was limited to 21 days after project posting. Furthermore, the significant increase in the 2020 application cycle was likely due to the expiration of the AB 1665 restrictions on awarding CASF grants in census blocks where a facilities-based service provider had accepted federal funding from the CAF II.

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CD disagrees that the existing program "may provide an opportunity for wasteful or inefficient spending of CASF program resources." As explained in the 2019 CASF Annual Reports, the CPUC has awarded 77 broadband infrastructure projects since the beginning of the program in 2008 through December 31, 2019. The 77 projects include last-mile, hybrid, and middle-mile projects that provide (or will provide) broadband access to 320,734 estimated potential households. Additionally, given the sheer geographic size of the State of California and the challenge of providing broadband service to rural and sparsely populated areas, it is estimated that it would take up to \$6 billion to provide broadband to every household in the state; the current CASF amount earmarked for this program is only \$565 million, a mere 9.4 percent of the required amount.

CD responds to the statement that "the adequacy and effectiveness of the CASF Program policies and procedures is limited by technological and regulatory constraints." Currently, there are no statutory or programmatic rules that prohibit the incorporation of future technologies such as Fixed Wireless 5G; and CD has received one application for a 5G-like broadband infrastructure deployment that is under consideration.

The following are CD's responses to SCO's recommendations related to Finding #2:

1. "Initiate a cost/benefit analysis of deploying broadband access to the remaining unserved areas."

CD agrees with this recommendation and believes that a new priority study would be of value and an important element of R.20-08-021. Resolution T-17443, adopted on June 26, 2014, cited areas in California that various CASF-funded regional consortia groups and state agencies have identified as priorities for broadband infrastructure deployment. This information was beneficial to help service providers identify underserved areas and several CASF projects were awarded in these priority areas. However, the CASF program awards grants rather than builds networks. Because of this, cost information on broadband deployment for specific areas of the state and their expected value, has been limited to average historical data gathered from past grant awards. A more granular level of analysis on an area basis would require additional staffing resources and expertise.

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As mentioned previously, CASF analysts are not engaged in feasibility studies for building networks, but rather are focused on providing monetary grants to applicants. While the CASF fund mitigates the capital cost of building networks in unserved areas, the economic feasibility calculation and therefore the risk of maintaining that network and realizing profitable rates and rates of return are the responsibility of the applicant. A grantee's cost for building a network is variable—heavily dependent on the technology (FTTH, Hybrid-fiber cable, fixed wireless) balanced against the number of residents and businesses subscribing to the network (take rate). Also, unserved areas are not comparable across the state; in exurban areas just beyond a city's suburb, the cost per home to

serve broadband may be less than a sparsely populated rural area. The goal of CASF is precisely to fund these areas which do not meet the feasibility standard and therefore would not get built without subsidization.

3. "Consider whether awarding grants only to projects that do not use outdated or abandoned technologies and infrastructures would make better use of program funds."

The CASF program's statute requires that the program be technology-neutral, and also has a very low build out minimum of 10/1 Mbps. This limits the ability of the Commission to exclude applications using antiquated services, such as DSL, or lower quality fixed wireless services that do not provide "future-proof" served speeds. This does not preclude emerging technologies such as 5G. Staff is currently reviewing one 2020 CASF application which would fund 5G technology deployment.

4. "Expand the program scope to include emerging technologies (for example, 5G) to improve the CASF program's likelihood of successfully increasing deployment of broadband service to 98% of California households in each consortia region."

As noted under recommendation #3, the CASF program is technology neutral. As such, it does not preclude emerging technologies such as 5G.

CD is committed to continuing to implement the CASF program effectively and to help close the Digital Divide in California. Should you have any questions, please feel free to contact me or Selena Huang at (415) 703-5247.

Sincerely,



Robert Osborn
Director, Communications Division

cc: Lucian Filler, Deputy Executive Director, CPUC
Selena Huang, Program Manager, CPUC
Louise Fisher, CASF Infrastructure Section Supervisor, CPUC
James Tang, CASF Adoption & Access Section Supervisor, CPUC
Enrique Gallardo, CASF Advisory Attorney, CPUC
Stacie Castro, CASF Advisory Attorney, CPUC

**Attachment 2—
2018 Annual Report
California Advanced Services Fund, Issued April 2019**



Building, Learning, Access, Connecting



2018 ANNUAL REPORT

California Advanced
Services Fund



CASF Annual Report
January 2018 - December 2018
Published April 2019

Photo: Oakland Housing Authority a CASF grantee, Lockwood Gardens

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Executive Summary

The California Public Utilities Commission (CPUC) submits this annual report on the activities conducted by the California Advanced Services Fund (CASF) program in 2018, pursuant to California Public Utilities (Pub. Util.) Code section 914.7(a).¹

The statutory goal of the CASF program is to provide broadband Internet access to 98 percent of the households (also described throughout the tables as HHS) in each Consortia region through a variety of authorized accounts by December 31, 2022.² These accounts include the Broadband Infrastructure Grant Account, the Rural and Urban Regional Broadband Consortia Grant Account, the Broadband Public Housing Account, the Broadband Adoption Account and the Line Extension program.³ The 2018 Annual Report presents progress made and status for each of the accounts, including financial and programmatic highlights, new and revised rules promulgated by the CPUC in response to legislation enacted in 2017,⁴ updates on existing and new accounts, awards and expenditures in 2018, leveraging federal funds and surcharge collections.

Assembly Bill (AB) 1665 (Garcia) revised the goal of the CASF program to approve funding for infrastructure projects that will provide access to broadband to no less than 98% of California households each consortia region.

Under existing statute, households in census blocks offered wireline and/or fixed wireless service broadband Internet service at speeds of 6 Mbps downstream and 1 Mbps upstream or greater are considered served. Only unserved households are eligible for Infrastructure grants.⁵ The latest available data, as of December 31, 2017, indicates that 96.5 percent of households in the State reside in census blocks with access to fixed (wireline and fixed wireless) broadband Internet service at served speeds.⁶ This is an

¹ The CPUC's Communications Division (CD) staff prepared this report.

² Pub. Util. Code § 281(b)(1)(A).

³ Pub. Util. Code § 281(c).

⁴ Assembly Bill (AB) 1665 (Garcia) was enacted on October 15, 2017.

⁵ Pub. Util. Code § 281(b)(1)(B) states that "unserved household" means a household for which no facilities-based broadband provider offers broadband service at speeds of at least 6 Mbps per second downstream and 1 Mbps upstream.

⁶ The underlying broadband availability data submitted by providers to the CPUC is validated by CD at the census block level. The CPUC analysis considers wireline and fixed-wireless technologies. Examples of "wireline" technologies include DSL, Cable Modem, and Fiber to the Home. These technologies use wires or cables that make a physical connection from the provider to the user. "Fixed wireless" solutions rely on radio waves at a particular frequency range to make a "point-to-point" connection between the provider and the user at a fixed location.

increase from prior years with the caveat that before 2018, served status was based on speeds of 6 Mbps downstream and 1.5 Mbps upstream which was revised in AB 1665 to 6 Mbps downstream and 1 Mbps upstream.

Despite the improved statewide broadband availability average, the digital divide of availability between urban and rural areas continues.⁷ Table 1 below shows the percentages of served and unserved census blocks in California, by their urban and rural designation from the U.S. Bureau of the Census.⁸ In rural areas, only 72.5 percent of households have access to broadband at served speeds, whereas urban has 97.8 percent, nearly achieving the state goal. However, of all the unserved areas in California, a greater percentage of households are in urban areas relative to rural, 59.3 percent and 40.7 percent respectively.

Table 1: Households Served and Unserved at Internet Speed Benchmarks for Wireline and Fixed Wireless Technologies as of December 31, 2017

Speed Benchmarks	Percentage of Households Offered Broadband			Unserved Households				
				Number of Households			Percentage of Households	
	Urban	Rural	Statewide	Urban	Rural	Statewide	Urban	Rural
>=6/1	97.8%	72.5%	96.5%	275,472	188,754	464,217	59.3%	40.7%
>=10/1	97.8%	71.5%	96.4%	278,765	195,837	474,602	58.7%	41.3%
>=25/3	97.3%	51.4%	94.9%	341,760	333,175	674,935	50.6%	49.4%
>=100 down	96.9%	41.3%	94.0%	384,360	403,007	787,367	48.8%	51.2%

The availability data used in this report is submitted annually to the CPUC and is validated to the census block level and while generally accurate, it is not without some error.⁹ The CPUC uses information provided by the public about their broadband service to improve the accuracy of broadband availability data and the interactive broadband map.¹⁰

Map 1 below, depicts the served and unserved areas in California and shows that many areas in rural California do not have adequate broadband service available (depicted in the colors red and yellow).

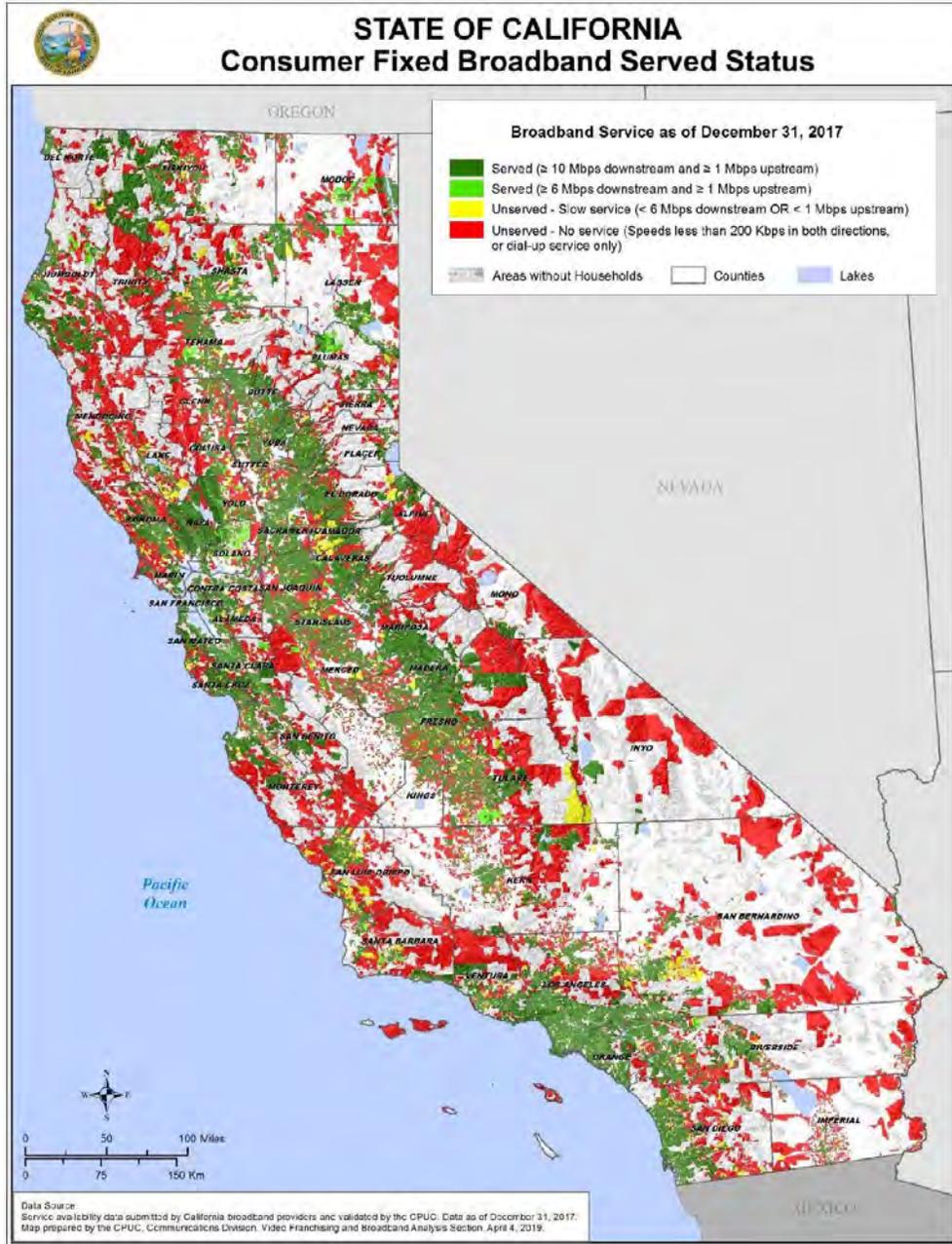
⁷ Pub. Util. Code § 281 (f)(3) asks the CPUC to identify unserved rural and urban areas and delineate the areas in the annual report.

⁸ The Census Bureau identifies two types of urban areas: 1) Urbanized Areas of 50,000 or more people and 2) Urban Clusters of at least 2,500 and less than 50,000 people. "Rural" encompasses all population, housing, and territory not included within an urban area. See: <https://www.census.gov/pso/reference/ua/urban-rural-2010.html>

⁹ A description of the validation methodology is available at <http://www.cpuc.ca.gov/General.aspx?id=2529>.

¹⁰ Public Feedback is received both electronically and via paper form via <http://www.cpuc.ca.gov/General.aspx?id=5265>. For the availability map, see <http://www.broadbandmap.ca.gov/>

Map 1: Wireline and Fixed Wireless Broadband Availability in California



Regarding Consortia representation of broadband availability, Table 2 below shows their served and unserved status. There are three regions above the 98 percent threshold: The Bay Area (a non-Consortium region made up of three counties), The East Bay Broadband Consortium and The Los Angeles County Broadband Consortium.

Table 2: Remaining Unserved Households in Each Consortia Region

STATE OF CALIFORNIA Wireline + Fixed Wireless Broadband Deployment Maximum Advertised Speeds as of December 31, 2017							
Consortium	All Households (CA DOF 1/1/2018)	Served Households (Speeds are at least 6 Mbps down AND 1 Mbps up)		Unserved Households with Slow Service (Speeds less than 6 Mbps down OR 1 Mbps up)		Unserved Households with No Service (Speeds less than 200 Kbps in both directions, or no service ¹)	
		Number	Percent	Number	Percent	Number	Percent
California	13,113,840	12,649,621	96.5%	92,128	0.7%	372,091	2.8%
Bay Area (no consortium: SF, San Mateo and Santa Clara)	1,275,290	1,253,569	98.3%	1,092	0.1%	20,629	1.6%
Broadband Consortium of the Pacific Coast	529,793	507,642	95.8%	5,843	1.1%	16,308	3.1%
Central Coast Broadband Consortium	241,029	223,483	92.7%	7,821	3.2%	9,725	4.0%
Central Sierra Connect Consortium	63,063	55,466	88.0%	2,359	3.7%	5,238	8.3%
Connected Capital Area BB Consortium	668,851	651,060	97.3%	4,579	0.7%	13,212	2.0%
East Bay Broadband Consortium	1,117,986	1,095,864	98.0%	1,439	0.1%	20,683	1.9%
Eastern Sierra Connect Regional Broadband Consortium	48,648	42,584	87.5%	463	1.0%	5,601	11.5%
Gold Country BB Consortium	261,757	245,245	93.7%	5,027	1.9%	11,485	4.4%
Tahoe Basin Project ²	18,725	17,821	95.2%	448	2.4%	456	2.4%
Inyo/Mono Broadband Consortium	13,741	10,602	77.2%	46	0.3%	3,093	22.5%
Inland Empire Regional BB Consortium	1,374,167	1,318,376	95.9%	8,381	0.6%	47,410	3.5%
Los Angeles County Regional Broadband Consortium	3,338,658	3,296,203	98.7%	2,441	0.1%	40,014	1.2%
North Bay / North Coast Broadband Consortium	375,865	356,445	94.8%	2,660	0.7%	16,760	4.5%
Northeast California Connect Consortium	229,369	207,368	90.4%	6,380	2.8%	15,621	6.8%
Orange County (no consortium)	1,037,173	988,506	95.3%	7,889	0.8%	40,778	3.9%
Redwood Coast Connect Consortium	72,676	64,634	88.9%	718	1.0%	7,324	10.1%
San Joaquin Valley Regional Broadband Consortium	1,234,029	1,162,998	94.2%	25,014	2.0%	46,017	3.7%
Southern Border Broadband Consortium	1,189,742	1,135,568	95.4%	7,128	0.6%	47,046	4.0%
Uprate California Connect Consortium	42,003	34,008	81.0%	2,848	6.8%	5,147	12.3%

Sources:
 Broadband deployment data collected from Internet Service Providers and validated by the California Public Utilities Commission. The CPUC defines "broadband service" as internet connectivity with download/upload speeds of at least 200 Kbps in one direction. Such service is considered "available" if the provider can provision new requests for service within 10 business days.
 Household data is based on the California Department of Finance, January 1, 2018 estimate.
¹ Dial-up only service is included in the "No Service" category.
² A project of the Gold Country BB Consortium. Not included in the California total, T-17550.
³ Under Resolution T-17550, BSCRBC maintains a three-county region even though responsibility for broadband development in Inyo and Mono counties is currently being managed by a sub-regional consortium, in the Inyo Mono Broadband Consortium.

While California has not achieved the statutory 98% availability goal, in 2018, the CASF Program continued to make progress towards the goal and to closing the digital divide in California. As of December 31, 2018, the CPUC has awarded 65 CASF Infrastructure Account project grants, with 42 projects now complete. These projects will build facilities to provide 59,013 households with access to Internet service at served speeds and to build middle-mile facilities that may reach an additional 67,225 households should last mile facilities be built. In total, the projects will potentially benefit 126,238 unserved no-service and unserved slow-service households.¹¹ Of the total of 42 completed projects, 35 are last mile infrastructure projects, and as of December 31, 2018 there were 11,391 reported household subscribers to the 20,660 connections built yielding a CASF infrastructure subscribership rate of 55 percent.

The CPUC did not award regional Consortia grants in 2018. Seven of the original 17 consortia groups continue to operate under the terms of their awarded grants to increase broadband deployment, access and adoption in the geographic regions. In 2018, the CPUC adopted new and updated rules for the Consortia Account to facilitate the deployment of broadband infrastructure by assisting infrastructure grant applicants in the project development or grant application process. The new consortia program rules and solicitation require more detailed reporting metrics that should provide better information for the Commission to assess program success. Consortia program applications for new consortia activities are due on May 17, 2019.

Regarding public housing infrastructure projects, the CPUC did not receive, nor award any new grants in 2018. The 330 public housing infrastructure projects approved to date provide free or low-cost broadband connectivity to 22,026 public housing units, at an average cost of \$495 per resident unit. Regarding public housing adoption projects, in 2018 the CPUC awarded 48 projects to provide access to digital literacy training for 11,197 residents. Since program inception, the CPUC has awarded 130 projects providing access to digital literacy training for 30,497 residents. To date, there are 43 completed projects that have trained 2,494 of the 10,395 residents at a total cost of \$1,004,780, resulting in 24% of completed project residents having been trained at a cost of \$403 per resident.

In 2018, the CPUC also implemented the new Adoption Account to provide grants to increase publicly available or after-school broadband access and digital inclusion and awarded 47 grants.

¹¹ Data based on CASF resolutions approving the 65 infrastructure projects. See <http://www.cpuc.ca.gov/General.aspx?ci=0057>.

Table 3, below, summarizes the total grant awards for each grant account from the program's inception through 2018, total payments made to grantees, the number of ongoing projects, and the number of rescinded grants. In 2018, the CPUC awarded \$11,245,036 in CASF grants amongst its five accounts.

Table 3: CASF Summary of Grant Awards as of December 31, 2018

Account	Total Authorized Since Inception	Grants Awarded Since Inception	Total Payments Since Inception	# of Awards			Calendar Year 2018		
				Total Awards	Completed	Ongoing	Grants Awarded in 2018	Total Awarded in 2018	Grants Rescinded in 2018
Infrastructure	\$565,000,000	\$236,184,034	\$119,165,591	65	42	23	4	\$6,485,199	0
Infra-Loan	\$5,000,000	\$600,295	\$40,977	3	1	0	0	\$0	2
Consortia	\$25,000,000	\$12,549,852	\$10,702,332	34	17	17	0	\$0	0
Public Housing	\$25,000,000	\$14,357,085	\$8,700,062	460	311	149	48	\$2,154,190	18
Adoption ¹²	\$25,000,000	\$2,605,647	\$0	47	0	47	47	\$2,605,647	0
Totals	\$645,000,000	\$266,137,897	\$138,608,962					\$11,245,036	

CASF Program AB 1665 Implementation

The CPUC established the CASF program in Decision (D). 07-12-054. Senate Bill 1193 (Stats. 2008, c.393) affirmed the CASF as a new universal service program focused on encouraging the deployment of broadband Internet infrastructure in unserved and underserved areas of California. The Legislature revised the program in the ensuing years, most recently with the enactment of AB 1665 in October 2017. A history of the CASF program and CPUC program developments is described in prior CASF annual reports.¹³

AB 1665 extended the goal of the program to approve funding for infrastructure projects that will provide broadband access to no less than 98 percent of California households in each Consortia region and extended the effective date to December 31, 2022.¹⁴ AB 1665 also revised the eligibility requirements for

¹² Awards for the Adoption Account were approved on December 31, 2018.

¹³ These reports are posted on the CPUC website at: <http://www.cpuc.ca.gov/PLIC/Telco/Information+for+providing+service/CASF/CASFReports.htm>

¹⁴ AB 1665 defined the Consortia regions as those that were identified by the Commission on or before January 1, 2017.

the Infrastructure Account and Public Housing Accounts, created a Right of First Refusal process, a Line Extension program, the Adoption Account, and eliminated the Loan Account.¹⁵

The revised CASF program rules provides:

1. Additional Funds to be collected in the amount of \$330 million:
 - a. The Infrastructure Account funding received \$300 million; The new Line Extension pilot program was established with \$5 million from the Infrastructure Account;
 - b. The Consortia Account received \$10 million;
 - c. The new Adoption Account was created and received \$20 million;
 - d. The Public Housing Account received no new funds but eligible applicants may apply for funding under the Infrastructure and Adoption Accounts when Public Housing funds are exhausted;
2. The 98% Infrastructure availability goal is measured by each consortia region;
3. Economically disadvantaged communities are prioritized;
4. Eligible projects areas for infrastructure projects are only for unserved areas;
5. Infrastructure projects must provide internet speeds of 10 Mbps downstream and 1 Mbps upstream (10/1) in areas with speeds below 6 Mbps downstream and 1 Mbps upstream (6/1).
6. Prohibits CASF funding in census blocks having federal Connect America Fund (CAF) accepted locations, except when the provider receiving CAF support applies to CASF to build beyond its CAF accepted locations.

On February 14, 2018, assigned Commissioner Martha Guzman Aceves issued an Amended Scoping Memo and Ruling with a Staff Proposal implementing the changes to the program as a result of AB 1665. The scoping memo also made other programmatic changes and created new rules for the new program. The proceeding was divided into two phases, Phase I included the Adoption, Public Housing and the Loan accounts. Phase II included the Broadband Infrastructure Account, the Line Extension pilot program, and the Consortia Account. Five public workshops were held in the cities of El Centro, Los Angeles, Madera, Oroville and Sacramento.

¹⁵ CD via a budget change proposal obtained 5 additional staff to address additional workload created by the passage of AB 1665. Two CASF sections were created. The CASF Adoption and Access Section implements the Consortia, Public Housing, Adoption accounts and broadband merger compliance issues. The CASF Infrastructure and Market Analysis section implements the Infrastructure Account.

In 2018, the CPUC issued the following decisions:

- Decision (D.) 18-06-032 to implement the Adoption, Public Housing, and Loan accounts;
- D.18-10-032 to implement the Consortia Account.
- D.18-12-018 to revise the Infrastructure Account rules.

In 2019, the CPUC will continue to address other CASF program implementation elements and establish the most efficient and effective strategies to reach the new goal of providing broadband access to no less than 98 percent of California households in each consortia region. Rules for the new Line Extension pilot program were issued in the Spring of 2019, allowing individual households or property owners to offset the costs of connecting to an existing or proposed facility-based broadband provider. The CPUC opened a new round of solicitation for consortia pursuant to AB 1665. The deadline for infrastructure grant applicants to submit their proposals to build out infrastructure in eligible areas is May 1, 2019.

CASF Program Financial Status

The CASF is funded by a surcharge on revenues collected by telecommunications carriers from end-users of intrastate telecommunication services. Pursuant to Pub. Util. Code section 281 (d)(3), the CPUC may collect a sum not to exceed \$330 million to go to all of the programs funded by the surcharge. The CPUC may collect the sum beginning with the calendar year starting on January 1, 2018, and continuing through the 2022 calendar year, in an amount not to exceed \$66 million annually, unless the CPUC determines that collecting a higher amount in any year will not result in an increase in the total amount of all surcharges collected from telephone customers that year.¹⁶

Table 4, below, presents the status of the CASF Fund and the projected amount to be collected in each year through 2022. In total, the program is authorized to collect \$645 million. The CPUC collected its total authorized amount of \$315 million to fund the CASF program through 2016 in December 2016, then set the surcharge rate to zero through 2017. Pub. Util. Code section 281(d)(3) was amended with passage of AB 1665 which authorized an additional \$330 million in funds to be collected by a surcharge which began on March 1, 2018. At the current surcharge rate, the estimated collection by the year 2022 will be \$616 million, which though lower than authorized is subject to variation of the future surcharge base.

¹⁶ Pub. Util. Code § 281(d)(3).

Table 4: Surcharge Rates and Estimated Collection Through 2022

Calendar Year	Surcharge Rate	Surcharge Collection	Total	Variance (Under collection)	Estimated Running Total
2008-2010	0.25%	\$115 million	\$115 million	-	\$115 million
2011	0.14%	\$467,496	\$467,496	(\$9 million)	\$116 million
2012	0.14%	\$22 million	\$22 million	(\$3 million)	\$138 million
2013	0.164%	\$22 million	\$22 million	(\$3 million)	\$160 million
2014	0.46%	\$38 million	\$38 million	\$13 million	\$198 million
2015	0.464%	\$58 million	\$58 million	\$33 million	\$256 million
2016	0.464%	\$56 million	\$56 million	\$31 million	\$312 million
2017	0.0%	\$3 million	\$3 million	(\$3 million)	\$315 million
2018	0.56%	\$37 million	\$37 million	(\$18 million)	\$352 million
2019 (est.)	0.56%	\$66 million	\$66 million	-	\$418 million
2020 (est.)	0.56%	\$66 million	\$66 million	-	\$484 million
2021 (est.)	0.56%	\$66 million	\$66 million	-	\$550 million
2022 (est.)	0.56%	\$66 million	\$66 million	-	\$616 million
Total			\$616 million		

Surcharge rate changes:

- Set to 0.025% by Decision 07-12-054 (December 20, 2007), effective January 1, 2008
- Set to 0.0% by Resolution T-17248 (December 17, 2009), effective January 1, 2010
- Set to 0.14% by Resolution T-17343 (September 22, 2011), effective November 1, 2011
- Set to 0.164% by Resolution T-17386 (February 20, 2013), effective April 1, 2013
- Set to 0.464% by Resolution T-17434 (February 27, 2014), effective April 1, 2014
- Set to 0.0% by Resolution T-17536 (October 13, 2016), effective December 1, 2016
- Set to 0.56% by Resolution T-17593 (December 19, 2017), effective March 1, 2018

Table 5, below, summarizes the surcharge rates, collections and other revenues the CASF received from inception of the program through December 31, 2022.

Table 5: CASF Surcharge Revenue* 2008 – Fiscal Year 2018

	Revenues	Other Revenue	Total Revenues	Surcharge Rate	Effective Date
FY 08-09	\$79,017,271	\$350,967	\$79,368,238	0.25%	1/1/2008
FY 09-10	\$36,284,686	\$657,998	\$36,942,684	0.00%	1/1/2010
FY 10-11	\$230,528	\$526,221	\$756,749	0.00%	5/1/2011
FY 11-12	\$11,000,027	\$157,400	\$11,157,427	0.14%	11/1/2011
FY 12-13	\$23,290,541	\$127,069	\$23,417,610	0.16%	4/1/2013
FY 13-14	\$28,649,903	\$892,064	\$29,541,967	0.46%	4/1/2014
FY 14-15	\$65,609,157	\$315,686	\$65,924,843	0.46%	6/1/2015
FY 15-16	\$56,326,670	\$823,272	\$57,149,942	0.46%	11/1/2016
FY 16-17	\$24,043,248	\$1,680,567	\$25,723,816	0.00%	12/1/2016
FY 17-18	\$16,393,549	\$2,855,800	\$19,249,348	0.56%	3/1/2018
July - Dec 2018	\$22,503,591	-	-	0.56%	9/1/2018
Total	\$363,349,171	\$4,183,397	\$322,208,157		

*Data based on CALSTARS Q24 and Q26 FY year-end reports. Other Revenues include investment income, loan repayment and earned interest. The CPUC Fiscal report is through the last fiscal year ending June 30, 2018. FY 18/19 is not available.

Table 6, below, presents CASF revenues, expenditures and fund balance as of fiscal year end June 30, 2018. As of June 30, 2018, the CASF account had a total fund balance of approximately \$83 million.

Table 6: CASF Revenue and Expenditures as of 6/30/2018

CASF Revenues, Disbursements and Fund Balance – As of June 30, 2018				
	CY 2008-2016	CY 2017	CY 2018 (Jan-Jun)	Total As of 06/30/2018
Revenues				
Regulatory Fees (Surcharge/MTS Revenue)	\$318,024,761	\$6,601,700	\$16,219,117	\$340,845,578
Loan Repayment and Interest	\$24,506	\$5,941	\$6,684	\$37,131
Investment Income	\$4,158,890	\$1,950,161	\$2,240,864	\$8,349,915
Total Revenues	\$322,208,157	\$8,557,802	\$18,466,665	\$349,232,624
Infrastructure Grant Account – Local Assistance	\$66,629,176	\$19,359,398	\$7,930,457	\$93,919,031
Infrastructure Grant Account – State Operations	\$9,899,833	\$1,961,146	\$1,828,707	\$13,689,686
Infrastructure Grant Account Sub Total	\$76,529,009	\$21,320,544	\$9,759,164	\$107,608,717
Infrastructure Loan Account – Local Assistance	\$332,715	\$2,639	\$0	\$335,354
Infrastructure Loan Account – State Operations	\$692,102	\$110,313	\$50,147	\$852,562
Infrastructure Loan Account Sub Total	\$1,024,817	\$112,952	\$50,147	\$1,187,916
Infrastructure Line Account – Local Assistance	\$0	\$0	\$0	\$0
Infrastructure Line Account – State Operations	\$0	\$0	\$0	\$0
Infrastructure Line Account Sub Total	\$0	\$0	\$0	\$0
Consortia Grant Account – Local Assistance	\$8,611,165	\$923,423	\$746,472	\$10,281,060
Consortia Grant Account – State Operations	\$661,397	\$166,882	\$151,388	\$979,667
Consortia Grant Account Sub Total	\$9,272,562	\$1,090,305	\$897,860	\$11,260,727
Public Housing Grant Account – Local Assistance	\$1,938,912	\$3,683,957	\$1,363,087	\$6,985,956
Public Housing Grant Account – State Operations	\$243,494	\$174,290	\$138,762	\$556,546
Public Housing Account Sub Total	\$2,182,406	\$3,858,247	\$1,501,849	\$7,542,502
Adoption Grant Account – Local Assistance	\$0	\$0	\$0	\$0
Adoption Grant Account – State Operations	\$0	\$0	\$0	\$0
Adoption Account Sub Total	\$0	\$0	\$0	\$0
Total Disbursement	\$89,008,794	\$26,382,048	\$12,209,020	\$127,599,862
Available Funds	\$233,199,363	\$17,824,246	\$6,257,645	\$221,632,762
Outstanding Encumbrances (Commitments) as of June 30, 2018:				\$138,668,972
				Fund Balance: \$82,963,790
Data is based on CALSTARS reports ending June 30, 2018. July 1* through December 31* data is unavailable because starting FY 2018-19, the CPUC changed its accounting system from CALSTARS to Fijical. As of the publishing date of this report, the accounting system conversion has yet to be completed. Neither the Infrastructure Line Account or the Adoption Grant Account were operational before July.				

Recipients of Funds in 2018 and Expected Benefits

Pub. Util. Code sections 914.7(a)(3) and (4) require the CPUC to report on the recipients of funds and the geographic regions of the state affected by funds expended from the CASF in the prior year. Pub. Util. Code sections 914.7(a)(5), (6), (7), and (8) require the CPUC to report on the expected benefits to be derived from the funds that were expended, details on the status of each project, the actual broadband adoption levels from the funds expended from the CASF in the prior year, and the cost per household. The following sections are organized by each account and provides the statutorily required information in tables and maps.

Infrastructure Grant Account

The CASF Infrastructure Grant Account (also called the Broadband Infrastructure Account) provides funding to Internet service providers to build facilities that delivered broadband Internet access to unserved households. In 2018, the CPUC adopted rules implementing AB 1665, awarded four new and one supplemental CASF Infrastructure projects and paid roughly \$24 million in reimbursements to project grantees.

In 2018, CASF Infrastructure Grant awards totaled roughly \$6.5 million to 5 grants, with roughly \$24 million in grantee reimbursements.

Approved Revised Rules

The CPUC in D.18-12-018 significantly revised the CASF program to be consistent with AB 1665. Notable revisions include: funding up to 100% of project costs, project identification by census blocks, an updated process for challenging an application and an expedited staff review and approval process for projects meeting specific low-cost and low-income criteria. These changes and increased clarity should lead to faster approval of quality projects deploying last-mile broadband Internet service to unserved households, with a specific focus on projects serving low-income communities and areas lacking any broadband Internet service. The CPUC is accepting applications for grant awards on an annual basis. The deadline for applications this year is, May 1, 2019.

Total Awards Since Inception of the CASF Infrastructure Grant Program

Table 7, below, shows the program data including household access to broadband Internet service from the 65 projects approved and approximately \$236 million awarded through December 31, 2018. Last mile infrastructure projects include direct connections to identified households for which facilities are to be built.

Table 7: Historical Cumulative Grant Information Grants Awarded

Approved Projects (2008-2018)	Total Infrastructure Awards	Unserved IIII No-service	Unserved IIII Slow-service*	Total Households
Last Mile	\$178,591,044	17,179	41,834	59,013 connections
Middle Mile	\$57,592,990	59	52,850	67,225 potential beneficiaries**
Total Infrastructure Projects (65 Projects)	\$236,184,034	17,238	109,000	126,238 potential and direct connections

* The definition of underserved at <6/1.5 service was changed to unserved-slow-service at <6/1 to conform with AB 1665.

** Middle Mile Projects: includes both direct connections and an estimate of the potential number of households that may be served should last mile facilities be constructed to interconnect with the middle-mile grant facility.

Map 2 below, depicts the geographic location of the 65 CASF infrastructure grants awarded and in good standing since program inception, through December 31, 2018, excluding the 30 rescinded grants referenced in Attachment A-4, to this report.

CASF Infrastructure Grants Awarded in 2018

In 2018, the CPUC awarded four new projects, one supplemental grant for an existing project and one approval for environmental work completed. In total, the CPUC awarded approximately \$6.5 million for the new and supplemental projects. Project awards were granted after comprehensive review and approval through separate CPUC Resolutions.

The projects approved and supplemented in 2018 are expected to provide access to over 3,480 households at an average cost of \$2,911 per household. Three of the six projects will be constructed by incumbent local exchange telephone companies, one project will be constructed by an electric cooperative and two will be built by fixed wireless providers. Five of the projects will utilize wireline technology to provide last mile connections and service to households, while one project will utilize fixed wireless technology to provide service. All projects awarded grants in 2018 are located in consortia regions that have not met the goal, pursuant to statute, to provide broadband access to 98 percent of the households in each consortia region.¹⁷

Table 8, below, shows the infrastructure grants awarded in 2018 by county. Information about all Infrastructure Grant Account recipients since program inception are presented in Attachment A of this report.¹⁸ Grants to Siskiyou Telephone and Cal.net Inc., made in 2018 were supplemental for California Environmental Quality Act (CEQA)-related work. However, the original grants made to Siskiyou Telephone and Cal.net Inc., were awarded prior to 2018 and the data for underserved and unserved households are reported in previous CASF Annual Reports. Therefore, these amounts are not included as grants awarded in 2018.

¹⁷ Pub. Util. Code § 281 (b)(1)(a).

¹⁸ See Page 54 for Attachment A-L.

Table 8: Grants Awarded from the CASF in 2018 by County

County	Resolution #	Recipient	Grant Name	Approval Date	Expected Completion Date	Total Under/Unserv'd HHs	Funds Requested Per HH	Total Grant/Loan Award
Siskiyou	T-17623	Siskiyou Telephone	Happy Camp to Somes Bar	8/9/2018	8/8/2020	N/A	N/A	N/A*
Riverside	T-17581	Anza Electric Cooperative, Inc.	Connect Anza Phase 2	5/31/2018	4/30/2020	400	\$4,490	\$1,796,070
El Dorado	T-17622	Cal.net, Inc.	El Dorado North Supplemental CEQA	8/1/2018	7/31/2020	N/A	N/A	\$98,795
Marin	T-17608	Inyo Networks, Inc.	Bolinas Gigabit Network	5/18/2018	6/17/2020	571	\$3,273	\$1,868,881
Imperial	T-17614	Frontier California Inc.	Desert Shores	7/19/2018	8/18/2020	596	\$2,118	\$1,262,567
San Bernardino	T-17613	Frontier California Inc.	Lytle Creek	7/17/2018	8/16/2020	339	\$4,303	\$1,458,886
Totals						1,906	\$5,315	\$6,485,199

* Funding of \$3,645,085 was awarded to Siskiyou Telephone in 2016 (Resolution T-17539) for CEQA-related work but not released until 2018 by Resolution T-17623 and is therefore not counted toward 2018 totals.

Reimbursements to Grant Recipients in 2018

In 2018, the CASF Infrastructure Account reimbursed over \$24 million for twelve active projects, as summarized in Table 9 below. Detailed historical information of all Infrastructure Grant Account recipients, since program inception is presented later in this report.¹⁹

The twelve projects were spread across eleven counties and will ultimately provide access to 34,819 unserved households. The average number of households served by these projects is approximately 2,900, with an average cost per household of approximately \$5,400. In 2018, three of these projects were completed. Race Communications completed projects in Kern, Mono and San Bernardino Counties and Sunesys, LLC completed its project in Santa Cruz and Monterey Counties.

Project costs depend on the technology used to provide the connection and the physical characteristics of the service area. For instance, the Gigafly Occidental project will ultimately provide wireline broadband Internet service to 458 unserved households at an average cost of \$16,784. The project covers difficult terrain and the unserved households are located at long distances from provider facilities. Another project

¹⁹ See Attachment A-1.

that will ultimately provide service to 1,537 unserved households, using fixed wireless technology, is the El Dorado North project being built by Cal.net, at a cost of \$742 per household. CalNeva's Rural Fresno County Gigabyte project will provide 5,480 unserved households with access to broadband Internet service at a program cost of \$93 per household, utilizing existing abandoned hybrid fiber-coaxial infrastructure.

Table 9: Recipients of Funds Expended from the CASF in 2018

County	Recipient	Grant Name	Approval Date	Status	Total Under/Unserved HHs	Funds Requested Per HH	Total Grant/Loan Award	2018 Grant/Loan Payments
Kern	Race Telecommunications (Final Payment)	Kern County High Desert	10/17/13	Complete	4,371	\$2,879	\$12,583,343	\$815,158
Santa Cruz/ Monterey	Sunesys, LLC (Final Payment)	Connected Central Coast	10/04/14	Complete	11,124	\$956	\$10,640,000	\$4,057,837
Mono	Race Telecommunications (Final Payment)	Mono County 4 Areas Underserved	6/26/14	Complete	727	\$6,397	\$4,650,593	\$465,564
San Bernardino/ Los Angeles	Ultimate Internet Access	Wrightwood	07/05/15	Ongoing	1,857	\$1,043	\$1,937,380	\$534,740
El Dorado	Cal.net	El Dorado North	1/14/16	Ongoing	1,537	\$742	\$1,139,755	\$528,443
Imperial	TDS Telecom	Winterhaven	03/10/13	Ongoing	961	\$2,148	\$2,063,967	\$900,287
Fresno	Ponderosa Telephone Company	Cressman	10/04/14	Ongoing	70	\$14,677	\$1,027,380	\$911,972
Sonoma	Race Telecommunications	Gigafy Occidental	8/18/16	Ongoing	458	\$16,784	\$7,687,016	\$1,470,456
Marin	Inyo Networks	Nicasio	07/14/16	Ongoing	184	\$8,104	\$1,491,078	\$1,118,106
Mono	Race Telecommunications (Final Payment)	Gigafy North 395	01/12/16	Complete	444	\$7,037	\$3,124,490	\$2,199,235
San Bernardino	Race Telecommunications	Gigafy Phelan	7/13/17	Ongoing	7,606	\$3,633	\$27,629,599	11,353,779
Fresno	Calneva Broadband LLC	Rural Fresno – Coalinga Huron	11/05/17	Ongoing	5,480	\$93	\$511,170	110,648
Totals					34,819		\$74,485,771	\$24,466,225

Infrastructure Grant Program Benefits

The CASF Infrastructure Grant Account program is intended to increase access to broadband to help build economic capital, strengthen public safety resources, improve living standards, expand educational and healthcare opportunities, and raise the levels of civic engagement and governmental transparency. As noted by the California Broadband Task Force in 2008, in addition to growing consumer needs, business, research, government, education, library, healthcare, and community institutions require high-speed connectivity to:

- Share information
- Promote environmentally friendly technologies such as telecommuting, video conferencing, and high-quality video collaboration;
- Provide distance learning opportunities;
- Enable remote analysis of medical information; and
- Foster a greater civic discourse.²⁰

For 2018, the expected benefits of funds expended can be viewed qualitatively in terms of the number of previously unserved households with the opportunity to purchase significantly improved broadband Internet service as outlined above.²¹ Benefits may also be quantified using the “subscriber rate” that is calculated based on actual subscribers to projects, last mile connections built and cost per subscriber for the program. Viewed on a larger scale, the program is incrementally adding to the ability for all Californians to receive broadband service.

Table 10 below, summarizes the benefits that have accrued to California as a result of the CASF Infrastructure Grant Account in the form of broadband connections built, the number of subscriber beneficiaries of those connections, whether household, business or anchor institution, and the resulting adoption rate. Of interest is that business subscribership has exceeded the number of connections that had been authorized in grants and that anchor institutions subscribe at nearly 100 percent of the connections authorized in grants. These are direct indications of project success. However, of concern is that household subscribership at 55 percent lags behind the statewide average of broadband subscribership by about 19 percentage points.²² The lack of higher subscribership may indicate an inability or missed opportunity for consumers to access broadband, potentially due to financial and/or valuation reasons, or

²⁰ Final Report of the California Broadband Task Force – January 2008.

²¹ Pub. Util. Code § 914.7(a)(5) and (7) require reporting on program benefits and adoption levels from the prior year expenditures.

²² A caveat for the comparison that the statewide adoption estimates are for 2017 while Infrastructure Grant Account subscribership estimate is for 2018. These data are for the most recent years available. The estimate of statewide fixed broadband adoption is 74.4 percent at served speeds of 6 Mbps downstream and 1 Mbps upstream for the year ended December 31, 2017. While the 55 percent subscribership is derived from 2018 data collected for preparation of this report. California Public Utilities Commission, Communications Division 2019.

because some broadband projects were overbuilding lower speed fixed-wireless or copper networks that only offer service at unserved or underserved speeds to customers. Some consumers may choose to purchase these low-speed alternatives despite the availability of an improved infrastructure project. More study and evaluation are needed.

Table 10: Program Benefits of Funds Expended from Infrastructure Grants – All Subscribership Types for Completed Projects

	Reported Subscribers			Last Mile Connections Built Using Infrastructure Grant Funding			Subscribership Rate		
	Households	Business	Anchor Institutions	Households	Business	Anchor Institutions	Households	Business	Anchor Institutions
Subscribers to 35 Completed Last Mile Projects	11,391	360	23	20,660	330	24	55.1%	109.1%	95.8%

Table 11 below, summarizes the program benefits from the perspective of household subscriberhip and cost per household for last mile projects in years ending 2016 and 2018. Since the prior published CASF report,²³ households subscribing to broadband Internet service have increased, indicating that the program has been improving public benefits, albeit somewhat modest. Subscriberhip for completed projects has increased from 7,021 to 11,391 and the subscriberhip rate has increased from 44 percent to 55 percent. However, the cost per household has also increased from \$2,644 in 2016 to \$4,438 in 2018. Recall that the Infrastructure Account is attempting to address the areas of the state that do not economically support network improvement or deployment without subsidy. As networks are deployed in high-cost areas of the state, the cost of deployment will rise, especially if the deployments utilize entirely new fiber network builds rather than limited existing network upgrades, such as improving DSL electronics only.

Table 11: Program Benefits – Cost Per Household to Broadband Connections Built Using CASF Funding 2016 and 2018

Last Mile Projects	EOY 2016	EOY 2018	Change
Households Subscribed	7,021	11,391	4,370 households
Subscription Rate	44%	55%	11 percentage points
Cost Per Household	\$2,644	\$4,838	\$2,194

²³ Annual Report on the California Advanced Services Fund, California Public Utilities Commission, April 2017, pages 26-27.

Home Broadband Study to Measure Speed and Quality of Service

The Commission's Decision Analyzing the California Telecommunications Market and Directing Staff to Continue Data Gathering, Monitoring and Reporting on the Market (Decision 16-12-025 December 1, 2016) ordered staff to seek funding for a third-party survey of consumer broadband speed experience measured using the Commission's CalSPEED²⁴ fixed location test.²⁵

Staff has created a CalSPEED Home Broadband Study to implement this testing. Working with California State University Monterey Bay and California State University Chico, staff has developed a small peripheral device that measures home broadband speed and quality using the test protocols from its CalSPEED mobile testing apps and mobile drive test project.

Five hundred of these devices are being assembled for distribution to volunteers willing to participate in the study. Our first request for volunteers resulted in over 500 people with interest in participating. The study will initially distribute the devices pursuant to an allocation designed to include all home

broadband technologies, allowing an analysis of "promise v. performance" of broadband speeds by technology. Distribution, testing and analysis is expected to be conducted during 2019, and results will be included in the 2020 Annual CASF Report.

The CalSPEED Home Measurement Devices are also being used to validate the speed and quality of services deployed by grantees pursuant to CASF Infrastructure grants and may also be used to validate the speed and quality of services deployed pursuant to federal infrastructure grants issued in California by the FCC, the Department of Agriculture and other such programs that may be created.



Figure 1: CalSPEED Home Measurement Device

²⁴ CalSPEED is a CPUC testing tool that allows end-users to measure the quality and speed of their internet connection. It is available at <http://calspeed.org/index.html>.

²⁵D. 16-12-025, Ordering Paragraph 4 states: "The Communications Division staff shall budget and seek state funding for a third-party survey of consumer broadband speed experience measured by the CalSPEED fixed location test. Staff shall report to the Commission its findings and recommendations."

Consortia Account

Pre-AB 1665

Prior to AB 1665's enactment, the objective of consortia activities was to promote "regionally appropriate and cost-effective broadband deployment, access, and adoption." As of December 31, 2018, the CPUC had 17 regional consortia to fund consortia activities pursuant to the prior objective. Map 2 illustrates the distribution of the 17 regional consortia by county (geographic region) within California. The map shows that four of 58 counties are not represented by a regional consortium. They are San Francisco, San Mateo, and Santa Clara and Orange counties.

Post-AB 1665

AB 1665 revised the objective of the Rural and Urban Regional Broadband Consortia Grant Account (Consortia Account) to facilitate deployment of broadband services by assisting infrastructure applicants in the project development or grant application process. As specified by the CPUC, an eligible consortium may include representatives of organizations from local and regional government, public safety, health care, libraries, elementary, secondary and postsecondary education. It can also include representatives from, community-based organizations, tourism, parks and recreation, agricultural, business, workforce organizations, and air pollution control or air quality management districts. Additionally, a consortium is not required to have as its lead fiscal agent an entity with a certificate of public convenience and necessity.

AB 1665 also added a requirement that each consortium conduct an annual audit of its expenditures for programs funded by the Consortia Account and required that the CPUC consult with regional consortia, stakeholders, local governments, existing facility-based broadband providers, and consumers regarding priority areas and cost-effective strategies to achieve the broadband access goal. This is done through public workshops conducted at least annually no later than April 30 of each year.

Approved Revised Rules

In October 2018, the CPUC approved Decision 18-10-032, adopting the revised rules, application requirements and guidelines for the Consortia Account. Consistent with the revised objective in AB 1665, the CPUC will fund grantees for activities consistent with the statutory mandate specified in Pub. Util. Code, § 281:

- Collaborating with the CPUC to engage regional consortia, local officials, internet service providers (ISPs), stakeholders, and consumers regarding priority areas and cost-effective strategies to achieve the broadband access goal.

Table 12: Consortia Grant Awards and Payments (as of 12/31/2018)

	Name of Consortium	^{1st} Approved Grants (2011-2013)	Resolution, Approval (Completion/Expected Completion Date)	^{2nd} Approved Grants (2016)	Resolution, Approval (Completion/Expected Completion Date)
1	California's One Million New Internet User Coalition	\$450,000	T-17355 2/16/2012 (Feb 2014)	-	-
2	Broadband Consortium of the Pacific Coast	\$300,000	T-17445 6/12/2014 (June 2016)	\$250,000	T-17550 1/19/2017 (Jan 2019)
3	Central Coast Broadband Consortium	\$450,000	T-17349 12/2/2011 (Dec 2013)	\$264,500	T-17529 8/18/2016 (Aug 2018)
4	Central Sierra Connect Consortium	\$450,000	T-17355 2/16/2012 (Feb 2014)	\$249,000	T-17544 12/1/2016 (Dec 2018)
5	Connected Capital Area Broadband Consortium	\$448,301	T-17355 2/16/2012 (Feb 2014)	\$298,750	T-17538 11/10/2016 (Nov 2018)
6	East Bay Broadband Consortium	\$450,000	T-17349 12/2/2011 (Dec 2013)	\$272,160	T-17529 8/18/2016 (Aug 2018)
7	Eastern Sierra Connect Consortium	\$450,000	T-17355 2/16/2012 (Feb 2014)	\$126,700	T-17550 1/19/2017 (Jan 2019)
8	Gold Country Broadband Consortium	\$450,000	T-17355 2/16/2012 (Feb 2014)	\$298,750	T-17538 11/10/2016 (Nov 2018)
9	Inland Empire Broadband Consortium	\$450,000	T-17355 2/16/2012 (Feb 2014)	\$300,000	T-17538 11/10/2016 (Nov 2018)
10	Inyo-Mono Broadband Consortium	-	-	\$105,216	T-17537 10/27/2016 (Oct 2018)
11	Los Angeles County Regional Broadband Consortium	\$2,310,000	T-17349 12/2/2011 (Dec 2013)	\$600,000	T-17544 12/1/2016 (Dec 2018)
12	North Bay/North Coast Broadband Consortium	\$250,000	T-17445 6/12/2014 (June 2016)	\$250,000	T-17544 12/1/2016 (Dec 2018)
13	Northeast California Connects Consortium	\$449,991	T-17349 12/2/2011 (Dec 2013)	\$289,343	T-17550 1/19/2017 (Jan 2019)
14	Redwood Coast Connect Consortium	\$450,000	T-17349 12/2/2011 (Dec 2013)	\$208,000	T-17537 10/27/2016 (Oct 2018)
15	San Diego Imperial Regional Broadband Consortium	\$450,000	T-17355 2/16/2012 (Feb 2014)	-	-
16	San Joaquin Valley Regional Broadband Consortium	\$450,000	T-17349 12/2/2011 (Dec 2013)	\$180,000	T-17537 10/27/2016 (Oct 2018)
17	Southern Border Broadband Consortium	-	-	\$450,000	T-17561 4/6/2017 (Apr 2020)
18	Tahoe Basin Projects	\$167,000	T-17440 5/15/2014 (May 2016)	\$200,000	T-17529 8/18/2016 (Aug 2018)
19	Upstate California Connect Consortium	\$448,184	T-17349 12/2/2011 (Dec 2013)	\$267,445	T-17550 1/19/2017 (Jan 2019)
	Total	\$8,873,476		\$3,226,376	

Consortia Awarded in 2018

There were no new awards in 2018. Out of 17 consortia groups in the existing 2016 grant cycle, seven consortia grant programs ended as of December 31, 2018. Four consortia requested and were granted no-cost extensions. On March 29, 2019 the CPUC released a third solicitation pursuant to new funding in AB 1665. Table 13, shows the current status of the consortia accounts and their budget summary.

Table 13: Consortia Account, 2016 Cycle Summary and Budget as of 12/31/2018

#	Consortium	Start Date	End Date	Extension	Approved Budget	Remaining Budget
1	Broadband Consortium of the Pacific Coast	2/19/2017	2/19/2019	5/1/2019	\$250,000	\$157,251
2	Central Coast Broadband Consortium	9/18/2016	9/8/2021		\$264,500	\$264,500
3	Central Sierra Connect Broadband Consortium	1/1/2017	1/1/2020		\$249,000	\$182,703
4	Connected Capital Area Broadband Consortium	12/10/2016	12/10/2018		\$298,750	\$30,519
5	East Bay Broadband Consortium	9/18/2016	9/18/2019		\$272,160	\$151,042
6	Eastern Sierra Connect Regional Broadband Consortium	2/19/2017	2/19/2019		\$126,700	\$79,811
7	Gold Country Broadband Consortium	12/10/2016	12/10/2018	5/1/2019	\$300,000	\$38,925
8	Inland Empire Regional Broadband Consortium	12/10/2016	12/10/2018		\$300,000	\$37,501
9	Inyo Mono Broadband Consortium	11/27/2016	11/27/2018		\$105,216	\$97,933
10	Los Angeles County Regional Broadband Consortium	1/1/2017	1/1/2018	6/30/2018	\$600,000	\$7,956
11	North Bay/North Coast Broadband Consortium	1/1/2017	1/1/2019		\$250,000	\$67,508
12	Northeast California Connect Consortium	2/19/2017	2/19/2019		\$289,343	\$167,688
13	Redwood Coast Connect Broadband Consortium	11/27/2016	11/27/2018		\$208,000	\$158,924
14	San Joaquin Valley Regional Broadband Consortium	11/27/2016	11/27/2019		\$180,000	\$180,000
15	Southern Border Broadband Consortium	5/6/2017	5/6/2020		\$450,000	\$402,823
16	Tahoe Basin Project	9/18/2016	9/18/2018	1/1/2019	\$200,000	\$57,051
17	Upstate California Connect Consortium	2/19/2017	2/19/2019		\$267,445	\$143,697
	Total				\$1,611,114	\$2,223,831

Reimbursements to Consortia Recipients in 2018

In 2018, the Consortia Account reimbursed over \$1,391,273 million for 17 consortia groups. Table 14, below, shows disbursement summary in 2018 and total disbursement for existing consortia groups as of December 31, 2018.

Table 14: Consortia Account, 2016 Cycle Disbursement Summary

Consortium		Amount Disbursed in Each Year			Total Disbursement
		2016	2017	2018	As of 12/31/2018
1	Broadband Consortium of the Pacific Coast	\$0	\$0	\$92,749	\$92,749
2	Central Coast Broadband Consortium	\$0	\$0	\$0	\$0
3	Central Sierra Connect Broadband Consortium	\$0	\$31,737	\$34,561	\$66,297
4	Connected Capital Area Broadband Consortium	\$0	\$83,811	\$184,421	\$268,231
5	East Bay Broadband Consortium	\$13,968	\$33,026	\$74,124	\$121,118
6	Eastern Sierra Connect Regional Broadband Consortium	\$0	\$7,950	\$38,940	\$46,889
7	Gold Country Broadband Consortium	\$0	\$109,714	\$151,361	\$261,075
8	Inland Empire Regional Broadband Consortium	\$0	\$149,999	\$112,500	\$262,499
9	Inyo Mono Broadband Consortium	\$0	\$0	\$7,283	\$7,283
10	Los Angeles County Regional Broadband Consortium	\$0	\$393,989	\$198,055	\$592,044
11	North Bay/North Coast Broadband Consortium	\$0	\$73,591	\$108,901	\$182,492
12	Northeast California Connect Consortium	\$0	\$0	\$121,655	\$121,655
13	Redwood Coast Connect Broadband Consortium	\$0	\$17,781	\$31,295	\$49,076
14	San Joaquin Valley Regional Broadband Consortium	\$0	\$0	\$0	\$0
15	Southern Border Broadband Consortium	\$0	\$0	\$47,177	\$47,177
16	Tahoe Basin Project	\$11,631	\$66,813	\$64,504	\$142,949
17	Upstate California Connect Consortium	\$0	\$0	\$123,748	\$123,748
Total		\$25,599	\$968,411	\$1,391,273	\$2,385,283

Consortia Account Benefits

For year 2018, the payments made to the existing consortia, representing 54 out of 58 counties in California, were for the following activities:

- Identifying potential CASF infrastructure projects, along with other opportunities, where providers can expand and improve their infrastructure and service offerings to achieve the state's goal of reaching 98% broadband deployment.
- Providing information and data about broadband availability and demand aggregation to local broadband providers and informing them about CASF.
- Inventorying regional broadband assets or mapping broadband availability in the area; Improving access for low-income populations.
- Increasing adoption through efforts such as digital literacy training.
- Providing education and information to policymakers about broadband deployment, access, and adoption and identifying existing barriers and prospective strategies to help bridge the "digital divide."²⁷

To assess Consortia Program benefits, Staff sent a data request on January 29, 2019, to the consortia requesting outcomes of their access, adoption and deployment efforts. Of the 17 consortia, 14 responded detailing their efforts in deployment and adoption, as shown in Attachment B.²⁷ Of these, 12 consortia described their deployment and adoption activities and two consortia²⁸ described their adoption and access activities. The Eastern Sierra, Redwood Coast, and Gold Country consortia did not respond.

In 2018, only four consortia (Inland Empire, Southern Border, Northeast California Connect, and North Bay North Coast) reported that they participated in developing broadband infrastructure applications for the five infrastructure projects shown in Table 8. Four other consortia, (Central Sierra Connect, Pacific Coast, San Joaquin Valley, and Upstate California) reported they supported potential infrastructure projects in discussion and development in their region or participated in other deployment related activities. Given the reported activities it is difficult to assess and/or quantify program benefits and success. The new consortia program rules and solicitation require more detailed reporting metrics that should provide better information for the Commission to assess program success.

Map 3 below, illustrates the 17 regional consortia geographic regions by county. The four counties not represented by a regional consortium are San Francisco, San Mateo, Santa Clara, and Orange counties.

²⁷ Central Coast Broadband Consortium, Central Sierra Connect Consortium, Connected Capital Area Broadband Consortium, Inland Empire Broadband Consortium, Inyo-Mono Broadband Consortium, North Bay North Coast Broadband Consortium, Northeastern California Connect Consortium, Broadband Consortium of the Pacific Coast, San Joaquin Valley Regional Broadband Consortium, Southern Border Broadband Consortium, Tahoe Basin Project, Upstate California Connect Broadband Connect Consortium.

²⁸ East Bay Broadband Consortium, Los Angeles Broadband Consortium

Map 3: Approved CASF Consortia (Updated 2018)



Public Housing Account

The Public Housing Account was established by AB 1299 in 2013 to provide grants dedicated to broadband connectivity and adoption in publicly supported housing communities. Eligible applicants include a public supported community that is wholly owned by either a public housing agency or an incorporated non-profit organization that has received public funding to subsidize the construction or maintenance of housing occupied by residents whose annual income qualifies as “low” or “very low” according to federal poverty guidelines. AB 1665 limits the awarding of grants for infrastructure projects to unserved²⁹ housing developments. AB 1665 authorized publicly supported communities eligible for funding via the Public Housing Account to submit a CASF application for funding from the Infrastructure Account and/or Adoption Account, only after all funds from the Public Housing Account have been awarded.

Rules and Approved Revised Rules

In D. 18-06-032, the CPUC adopted revised guidelines for the Public Housing Account that establish project submission dates, reporting, payment and performance requirements.³⁰

The Public Housing Account may reimburse up to 100% for the following expenses for infrastructure projects:³¹

- All networking equipment, both hardware and software, including wireless access points;
- Low voltage contracting;
- Modems or routers (but not computers or human interface devices);
- Engineering & design;
- Hardware warranty;
- Installation labor from the Minimum Point of Entry to the individual unit; and
- Taxes, shipping and insurance costs directly related to broadband equipment deployed.

The Public Housing Account may reimburse up to 85% for the following expenses for adoption projects:

- Education and outreach efforts and materials;
- Desks and chairs to furnish a designated space for digital literacy;
- Acceptable computers and devices (excluding smartphones) and software intended for use either in a computer lab or households;
- Digital literacy instructors;

²⁹ A housing development is unserved when at least one housing unit within the housing development is not offered broadband Internet service, (Pub. Util. Code section 281(i)(3)(B)(ii)). The CPUC has defined unserved as a housing unit is not offered broadband Internet service if the unit does not have access to a commercially available broadband Internet service, such as Digital Subscriber Line (DSL), a cable modem, or another protocol, available at the unit. Resolution T-17575.

³⁰ Based on experience with the first application cycle, in February 2019, the Commission adopted D. 19-02-008 to make modifications and clarifications to the Adoption Account application requirements and guidelines.

³¹ From D.14-12-039, Appendix B, p. B1.

- Printers for a computer lab or other designated space for digital literacy;
- Routers; and
- Provision of residential technical support.

The CPUC authorized staff to approve applications through expedited review that meet established criteria.³² Where an application does not meet the above expedited review criteria, it may still be considered for a grant, but it must go through the CPUC Resolution approval process.

Total Awards Since Inception of Public Housing Account

The Public Housing Account is authorized \$20 million for grants and loans to finance infrastructure projects that connect publicly supported communities with broadband Internet. The Account is authorized \$5 million for adoption projects for residents in publicly supported communities. The CPUC began accepting applications for the Public Housing Account in January 2015. As of October 17, 2018, the CPUC no longer accepts applications for Public Housing Account adoption projects, because the \$5 million dedicated to broadband adoption in publicly supported communities was fully allocated.³³

Table 15, below, summarizes projects submitted, funding requested, awards and payments for both infrastructure and adoption projects as of December 31, 2018.

Table 15: CASF Public Housing Grants Summary (As of 12/31/2018)

Calendar Year	Grant Type	Number Projects Submitted	Total Funding Requested	Number Projects Awarded	Total Awarded*	Payments
2015	Infrastructure	264	\$7,828,678	85	\$2,114,099	\$234,356
	Adoption	90	\$3,359,637	14	\$364,584	\$0
2016	Infrastructure	229	\$7,182,546	160	\$4,984,714	\$1,566,549
	Adoption	59	\$2,035,433	42	\$1,339,656	\$106,088
2017	Infrastructure	0	\$0	85	\$2,335,243	\$3,483,170
	Adoption	4	\$150,430	26	\$905,583	\$200,788
2018	Infrastructure	0	\$0	0	\$0	\$2,115,859
	Adoption	16	\$624,889	48	\$2,154,190	\$993,252
Totals	Infrastructure	493	\$15,011,224	330	\$9,434,056	\$7,399,934
	Adoption	169	\$6,170,389	130	\$4,764,013	\$1,300,128
Total		662	\$21,181,613	460	\$14,198,069	\$8,700,062

*See Attachments C-1 and C-2 for a listing of all approved projects, award amounts and payments.

³²D.14-12-039, Appendix B, p. B13.

³³ The remaining \$235,987 was not considered great enough for a full round of applications and operational expenses.

Infrastructure Projects

As of December 31, 2018, the Public Housing Account has \$10,565,944 remaining for infrastructure projects.³⁴ As shown in Table 15, above, 493 infrastructure projects were submitted since program inception through calendar year 2018. Of these 493 projects, 330 projects have been awarded a total amount of \$9,434,056, with payments totaling \$7,399,934. No project applications were received or approved in 2018. However, payments totaling \$2,115,859 were made for 111 existing infrastructure projects.

Adoption Projects

Table 15, above, shows that of the 169 adoption projects submitted through calendar year 2018, 130 projects were awarded, with a total award amount of \$4,764,013 and total payments of \$1,300,128. In 2018, Public Housing payments totaled \$993,252 for the 50 existing adoption projects.

Table 16, below, lists the adoption project grants approved in 2018. There were 48 adoption projects approved in 2018 for a total of \$2,154,190. Out of the 48 approved projects, 46 were approved via expedited review and 2 were approved via resolutions. The projects approved in 2018 will provide digital literacy training for up to 11,197 residents at an average cost of \$344 per resident.

³⁴ This calculation is the remainder of the \$20 million allocated to the Public Housing Infrastructure Account minus the total awards shown in Table 15 and does not include state operations.

Table 16: Adoption Grants Approved in 2018 with Approval and Completion Dates

Grantee	Project Name	Grant Amount	Approval Date	Completion Date*
Bayview Hunters Point Multipurpose Senior Services, Inc.	Dr. George W. Davis Senior Residence	\$41,555.00	8/27/2018	5/27/2020
Christian Church Homes	Fargo Senior Center	\$42,000.00	5/4/2018	2/4/2020
Christian Church Homes	Harrison Street Senior Housing	\$25,420.00	3/28/2018	12/28/2019
Christian Church Homes	Sylvester Rutledge Manor	\$39,000.00	5/4/2018	2/4/2020
Christian Church Homes	Westlake Christian Terrace East	\$49,500.00	5/4/2018	2/4/2020
Christian Church Homes	Westlake Christian Terrace West	\$49,500.00	5/4/2018	2/4/2020
EA H Housing Corporation	Floral Gardens	\$43,286.25	8/22/2018	5/22/2020
EA H Housing Corporation	Fountain West	\$47,132.50	8/22/2018	5/22/2020
EA H Housing Corporation	Palm Court	\$37,238.50	8/22/2018	5/22/2020
EA H Housing Corporation	Riviera Apartments	\$24,960.00	8/22/2018	5/22/2020
EA H Housing Corporation	Rodeo Gateway	\$24,690.00	8/22/2018	5/22/2020
EA H Housing Corporation	San Clemente Place	\$41,478.00	8/22/2018	5/22/2020
EA H Housing Corporation	Silver Oak	\$14,679.50	8/22/2018	5/22/2020
EA H Housing Corporation	The Oaks	\$18,513.00	8/22/2018	5/22/2020
EA H Housing Corporation	Tunna House	\$18,150.00	8/22/2018	5/22/2020
EA H Housing Corporation	Vista Park 1	\$37,310.75	8/22/2018	5/22/2020
EA H Housing Corporation	Vista Park 2	\$37,310.75	8/22/2018	5/22/2020
East Bay Asian Local Development Corporation	California Hotel	\$49,850.00	7/20/2018	4/20/2020
East Bay Asian Local Development Corporation	Hismen Hin-Nu Terrace	\$49,994.00	7/20/2018	4/20/2020
East Bay Asian Local Development Corporation	Noble Tower Apartments	\$50,000.00	7/20/2018	4/20/2020
First Community Housing	Betty Ann Gardens	\$38,910.00	8/3/2018	5/3/2020
First Community Housing	Casa Feliz Studios	\$36,700.00	8/3/2018	5/3/2020
First Community Housing	Creekview inn	\$19,705.00	8/3/2018	5/3/2020
First Community Housing	Fourth Street Apts	\$38,910.00	8/3/2018	5/3/2020
First Community Housing	Japantown Senior Apts	\$36,700.00	8/3/2018	5/3/2020
First Community Housing	Orchard Parkview	\$36,700.00	8/3/2018	5/3/2020
Housing Authority of the County of San Bernardino	HACSB Digital Literacy Centers Project	\$405,730.50	12/13/2018	9/13/2020

Grantee	Project Name	Grant Amount	Approval Date	Completion Date*
Housing Authority of the County of San Bernardino	Maplewood homes	\$42,589	8/6/2018	5/6/2020
Housing Authority of the County of San Bernardino	Parkside Pines	\$36,519	8/6/2018	5/6/2020
Oakland Housing Authority	Lockwood Learning Center	\$98,495	4/26/2018	1/26/2020
Peoples' Self-Help Housing	Ocean View Manor	\$13,575	1/24/2018	10/24/2019
Peoples' Self-Help Housing	Oceanside Gardens	\$7,883	1/24/2018	10/24/2019
San Francisco Housing Development Corporation	Bayview Commons	\$23,716	1/24/2018	10/24/2019
San Francisco Housing Development Corporation	Hunters Point East	\$50,000	1/24/2018	10/24/2019
San Francisco Housing Development Corporation	Hunters Point West	\$49,265	1/24/2018	10/24/2019
San Francisco Housing Development Corporation	Westbrook	\$50,000	1/24/2018	10/24/2019
Satellite Affordable Housing Associates	Beth Asher	\$37,260	3/26/2018	12/26/2019
Satellite Affordable Housing Associates	Columbia Park Manor	\$41,930	3/26/2018	12/26/2019
Satellite Affordable Housing Associates	Lakeside Senior Apartments	\$46,360	3/26/2018	12/26/2019
Satellite Affordable Housing Associates	Lawrence Moore Manor	\$34,125	3/26/2018	12/26/2019
Satellite Affordable Housing Associates	Linda Glen	\$31,560	3/26/2018	12/26/2019
Satellite Affordable Housing Associates	Orchards Senior Homes	\$34,230	3/26/2018	12/26/2019
Satellite Affordable Housing Associates	Sacramento Senior Homes	\$30,150	3/26/2018	12/26/2019
Satellite Affordable Housing Associates	Stuart Pratt Manor	\$27,910	3/26/2018	12/26/2019
Tabernacle Community Development Corporation	Robert B Pitts Residences	\$49,400	7/20/2018	4/20/2020
WARD Economic Development Corporation	Rosa Parks Villas	\$23,746	9/21/2018	6/21/2020
WARD Economic Development Corporation	Tuelyn Terrace	\$26,820	9/21/2018	6/21/2020
WARD Economic Development Corporation	Ward Villas	\$43,733	9/21/2018	6/21/2020
TOTAL AWARDED IN 2018			\$2,154,190	
*Projected completion date is up to 21 months from the award date, if the grantee uses the full amount of time available for project completion.				

Public Housing Account Benefits

Infrastructure Projects

The 330 infrastructure projects approved through 2018 are expected to provide free or low-cost broadband connectivity to 22,026³⁵ public housing units, at an average cost of \$495 per resident unit.³⁶ Out of the 330 awarded projects, 267 projects have been completed as of December 31, 2018. The remaining 63 awarded projects are still in progress.

Adoption Projects

The 130 adoption projects approved since program inception through 2018 are expected to provide digital literacy training to 30,497 residents, at an average cost of \$277 weighted mean per resident (assuming all the residents were trained; the program requirement is that either 75% of the residents are trained or that the digital literacy classes are provided for a duration of one year after the ramp-up period). Out of the 130 approved adoption projects, 43 of the projects have been completed as of December 31, 2018 among 11 grantees listed in Table 17, below. A data request was sent to the 11 grantees with completed projects requesting the number of residents trained through their project and the number of residents who subscribe to broadband. Nine of these grantees provided project data as requested and two did not. Data for projects that did not respond was garnered from submitted completion reports.³⁷

An expected benefit from the Public Housing adoption projects is the number of residents trained. However, what constitutes 'residents' varies due to the type of resident population at the project location. At one location, the resident population are non-working seniors with only one or two people per unit, whereas at another location the resident population are low-income families with working adults. Typically, participation in digital literacy programs is greater at the location with a senior population due to their availability. And typically, digital literacy programs are designed for adults; if the location has many children, then participation rates are lower.

Another expected benefit is the increase in adoption rates for broadband services for residents in publicly supported communities. All grantees who completed their adoption project were asked to report the

³⁵ See attachment C-1.

³⁶ Per D.14-12-039 Public Housing Account Infrastructure Grants do not pay for maintenance or operation costs. The grant recipient must commit to charging residents no more than \$20 per month for broadband Internet service. However, almost all grant recipients do not charge residents.

³⁷ Grantees are required to provide the following information in their completion report – the number of residents who completed at least 8 hours of instruction, the number of residents trained who subscribed to broadband and the number of residents trained who are using their devices at home.

number of residents trained that subscribe to broadband. Of the 43 completed adoption projects noted in Table 17 below, 19 also received grants from the Public Housing Account for the installation of a Wi-Fi network.³⁸ All residents in those 19 public supported communities have connectivity to free Wi-Fi, and therefore reported 100% connectivity. However, note that staff does not have information about whether or not residents in those 19 public supported communities subscribe to a commercial provider. For the other 24 public supported communities, since a Wi-Fi network was not installed, grantees reported the actual number of residents trained that subscribes to a commercial service. Table 17 column “% Trained with Connectivity / Subscription” reflects this data.

Table 17 contains the completed Public Housing Account Adoption projects, and shows the number of residents, units, participants, and total payments and cost per resident trained. Of the 43 completed projects, only two locations trained more than 75% of residents. The average of residents trained by project was 24%, with a minimum 9% trained to a maximum of 79% trained. Thus, the average cost per resident trained by project is \$403. This is higher than would otherwise occur if participation were 75% as established in the program criteria. The minimum cost per resident trained by project was \$67, with the maximum cost at \$2,188. Some of the anecdotal reasons for low participation are that locations with families, as opposed to seniors, do not have time to participate and that some residents are uninterested and/or already know the technology.

³⁸ All 19 infrastructure projects have been completed and operational.

Table 17: CASF Public Housing Adoption Grants Completed Projects; Participation and Cost

Connectivity									
Subscription									
	Recipient	Project	Residents	Grant	Total Payment	Trained	% Trained*	% Trained with Connectivity / Subscription	Cost per Resident Trained*
1	BRIDGE Housing Corporation	Chestnut Creek Senior Housing	55	\$24,250	\$24,250	23	42%	78%	\$1,054
2	BRIDGE Housing Corporation	Emeryville	46	\$23,550	\$23,550	19	41%	89%	\$1,239
3	BRIDGE Housing Corporation	St. Joseph's Senior Apartments	103	\$33,130	\$33,130	42	41%	67%	\$789
4	Eden Housing, Inc.	Altenheim	136	\$19,380	\$18,030	64	47%	100%	\$282
5	Eden Housing, Inc.	Cottonwood Place Apartments	146	\$16,015	\$15,615	90	62%	88%	\$174
6	Eden Housing, Inc.	Studio 819 Apartments	61	\$12,880	\$12,830	47	77%	83%	\$273
7	Eden Housing, Inc.	Weinreb Place	24	\$12,351	\$11,951	19	79%	100%	\$629
8	Eden Housing, Inc.	Wexford Way	416	\$12,880	\$12,480	136	33%	85%	\$92
9	Episcopal Community Services of San Francisco	Bishop Swing Community	135	\$49,959	\$41,612	75	56%	100%	\$555
10	Episcopal Community Services of San Francisco	Canon Barcus Community House	153	\$49,520	\$35,547	32	21%	100%	\$1,111
11	Episcopal Community Services of San Francisco	Canon Kip Community House	103	\$49,593	\$36,092	38	37%	100%	\$950
12	First Community Housing	Curtner Studios Digital Connections	200	\$25,756	\$22,712	41	21%	100%	\$554

	Recipient	Project	Residents	Grant	Total Payment	Trained	% Trained*	% Trained with Connectivity / Subscription	Cost per Resident Trained*
13	First Community Housing	El Paseo Digital Connections	98	\$21,030	\$20,350	22	22%	100%	\$925
14	Housing Authority of the County of Los Angeles (HACoLA)	Carmelitos Housing Development	1750	\$28,210	\$19,223	288	17%	36%	\$67
15	Housing Authority of the County of Los Angeles (HACoLA)	Harbor Hills Housing Development	761	\$28,210	\$19,223	97	13%	33%	\$198
16	Housing Authority of the County of Los Angeles (HACoLA)	Nueva Maravilla Housing Development	1471	\$28,210	\$19,223	285	19%	38%	\$67
17	Jamboree Housing Corporation	Ceres Court Apartments	160	\$12,798	\$8,363	56	35%	71%	\$149
18	Jamboree Housing Corporation	Ceres Way Apartments	173	\$11,877	\$9,638	50	29%	90%	\$193
19	Jamboree Housing Corporation	Puerto del Sol Apartments	498	\$23,567	\$12,483	59	12%	80%	\$212
20	Jamboree Housing Corporation	Woodglen Vista Apartments	514	\$10,677	\$10,637	150	29%	30%	\$71
21	Mutual Housing California	Lemon Hill	258	\$42,058	\$25,118	24	9%	100%	\$1,047
22	Mutual Housing California	Mutual Housing at Sky Park	246	\$44,289	\$27,997	24	10%	100%	\$1,167
23	Mutual Housing California	Mutual Housing at Spring Lake	188	\$35,960	\$24,763	16	9%	100%	\$1,548

	Recipient	Project	Residents	Grant	Total Payment	Trained	% Trained*	% Trained with Connectivity / Subscription	Cost per Resident Trained*
24	Mutual Housing California	Mutual Housing at the Highlands	138	\$49,533	\$31,964	30	22%	100%	\$1,065
25	Mutual Housing California	New Harmony	104	\$38,122	\$26,251	12	12%	100%	\$2,188
26	Mutual Housing California	Owendale	183	\$25,670	\$19,722	26	14%	100%	\$759
27	Petaluma Ecumenical Properties (PEP Housing)	575 Vallejo Street Senior Apartments Adoption	46	\$10,550	\$7,023	28	61%	100%	\$251
28	Petaluma Ecumenical Properties (PEP Housing)	579 Vallejo Street Senior Apartments Adoption	41	\$9,430	\$6,271	25	61%	100%	\$251
29	Petaluma Ecumenical Properties (PEP Housing)	Acacia Lane Senior Apartments Adoption	47	\$10,190	\$6,772	27	57%	100%	\$251
30	Petaluma Ecumenical Properties (PEP Housing)	Casa Grande Senior Apartments Adoption	60	\$13,350	\$9,030	36	60%	100%	\$251
31	Petaluma Ecumenical Properties (PEP Housing)	Caulfield Lane Senior Apartments Adoption	23	\$5,220	\$3,512	14	61%	100%	\$251
32	Petaluma Ecumenical Properties (PEP Housing)	Kellgren Senior Apartments Adoption	53	\$11,650	\$7,776	31	59%	100%	\$251
33	Satellite Affordable Housing Associates	Amistad House	63	\$48,290	\$47,875	39	62%	100%	\$1,228

	Recipient	Project	Residents	Grant	Total Payment	Trained	% Trained*	% Trained with Connectivity / Subscription	Cost per Resident Trained*
34	Satellite Affordable Housing Associates	Arboleda Apartments Adoption	92	\$40,756	\$40,756	32	35%	100%	\$1,274
35	Satellite Affordable Housing Associates	Memitt Crossing Adoption	95	\$50,000	\$48,535	37	39%	100%	\$1,312
36	Satellite Affordable Housing Associates	Petaluma Avenue Homes	99	\$48,350	\$48,054	31	31%	100%	\$1,550
37	Satellite Affordable Housing Associates	Satellite Central	196	\$50,000	\$49,807	116	59%	100%	\$429
38	Satellite Affordable Housing Associates	Strawberry Creek Lodge Adoption	150	\$49,970	\$49,679	67	45%	100%	\$741
39	Satellite Affordable Housing Associates	Valdez Plaza	194	\$50,000	\$48,547	101	52%	100%	\$481
40	Silvercrest, Inc (non-profit)	Parc Grove Commons	559	\$38,894	\$20,806	61	11%	100%	\$341
41	Silvercrest, Inc (non-profit)	Parc Grove Northwest	381	\$38,894	\$16,161	45	12%	100%	\$359
42	Silvercrest, Inc (non-profit)	Viking Village	121	\$38,894	\$18,504	26	22%	100%	\$712
43	West Sacramento Housing Development Corporation	Patio Apartments	56	\$26,140	\$12,918	13	23%	100%	\$994
Totals			10,396	\$1,270,053	\$1,004,778	2,494			

Weighted average of 24% of all residents trained, with a cost of \$403 per resident trained

Map 4, below, depicts the distribution of the 330 approved infrastructure and 130 approved adoption projects by geographic region within California. No grants have been awarded north of Yuba due to the lack of applications submitted to the CPUC. Of the approved infrastructure projects, eight are in rural areas, and one of the approved adoption projects is in a rural area.³⁹

³⁹ As determined by the 2010 US Census data.

Map 4: CASF Grants to Public Housing Broadband Projects



Public Housing Compliance Efforts and Findings to Date

Infrastructure Projects 5-Year Post Completion Report Monitoring Challenges

Decision 14-12-039 requires grantees to maintain and operate the broadband network for five years after installation and completion of the project. Grantees are required to submit quarterly post-completion reports for five years that provide: Percentage of Uptime,⁴⁰ Number of Unique Log-ons by individuals,⁴¹ and Amount of Data used.⁴²

Based on the review of post-project reports, staff found many issues: 1) grantees were not consistently submitting reports every quarter, 2) grantees submitted reports that reported data for less than one quarter and 3) report dates were randomly chosen by grantees. For example, staff tracked the 2018 second quarter reports and found that out of 257 completed projects, only 164 reports were received. That means 14 grantees for 93 projects did not comply with the post-project reporting requirement.

Table 18 below, shows the total number of completed projects from inception and the number of post project completion reports received in 2018, second quarter.

Table 18: Public Housing 5-Year Post Project Completion Reporting

Public Housing 5-Year Post Project Completion Reporting		
Year Project Completed	Number of Projects Completed	Second Quarter 2018 Post Project Reporting
2015	14	
2016	71	
2017	119	
2018	53	
1 st Quarter	34	
2 nd Quarter	53	
Total Completed as of 6/30/2018	257	
2nd Quarter Reports Received		164
Total Reports Not Received		93

⁴⁰ The time or percentage the network service is up and operational.

⁴¹ Given that the Wi-Fi and DSL networks funded through the BPHIA typically do not have a network log-on, network usage is, instead, tracked by the number of individual devices that access the network monthly.

⁴² Data usage occurs whenever an individual stream, download, upload, use apps, or open browsers.

Infrastructure Project Site Visits

The State Controller’s Office (SCO) completed the second interim performance and financial audit of the CASF program, as required by Pub. Util. Code section 912.2(a) in March 2017.⁴⁵ The SCO recommended that the CPUC have staff dedicated to performing project management tasks, such as on-site visits to project locations to determine the status of the infrastructure projects. The CPUC agreed with the SCO’s recommendation and increased the number of site visits in 2018. Site visits consist of interviews with grantees, contractors, observation of the installation of wireless access points, speed tests, and reviewing installation of ISP circuits. Table 19 below, contains the 12 infrastructure projects visited in 2018.

Table 19: Public Housing Infrastructure Site Visits in 2018

Grantee	Project	City	Date Visited	Site Visit Activity
Self-Help Enterprises	Lincoln Plaza	Hanford	3/14/2018	Validate DSL installation
EAH Housing Corporation	Floral Gardens	Selma	3/15/2018	Validate Wi-Fi installation
Global CVCAH	Sunnyview II	Delano	3/15/2018	Validate DSL installation
Housing Authority of the County of Kern	Homer Harrison	Delano	3/15/2018	Validate Wi-Fi installation
Housing Authority of the County of Kern	Quincy St. Apartments	Delano	3/15/2018	Validate Wi-Fi installation
Self Help Enterprises	Washington Plaza Partners	Eatimart	3/15/2018	Validate DSL installation
Silvercrest, Inc. (non-profit)	Parc Grove Commons	Fresno	3/15/2018	Validate Wi-Fi installation
San Francisco Housing Development Corporation	Bayview Commons	San Francisco	6/5/2018	Validate Wi-Fi installation
San Francisco Housing Development Corporation	Hunters Point East	San Francisco	6/5/2018	Validate Wi-Fi installation
San Francisco Housing Development Corporation	Hunters Point West	San Francisco	6/5/2018	Validate Wi-Fi installation
The Banneker Homes, Inc.	Banneker Homes	San Francisco	10/17/2018	Validate Wi-Fi installation
EAH Housing Corporation	Buchanan Park	San Francisco	11/30/2018	Validate Wi-Fi installation

⁴⁵ CASF 2nd Interim Performance and Financial Audit Report (Issued March 30, 2017), available at <http://www.cpuc.ca.gov/General.aspx?id=0226>

On December 17, 2018, the CPUC hired a Senior Telecommunications Engineer to comply with audit recommendations from the SCO to conduct more site visits. Since then, the Senior Telecommunications Engineer has developed an improved process for verifying program compliance and created a site visit checklist. In 2019, plans are to conduct more site visits to validate and confirm project engineering, deployment, and operation quality.

Public Housing Infrastructure Assessment

Most, if not all, deployments funded through this program are dependent on the purchase of a digital circuit from an existing Internet Service Provider which is already serving the area.⁴⁴ Staff has found that nearly all infrastructure projects have broadband available to each residents location and therefore do not meet the “unserved” definition in SB 745 and Resolution T-17575. Therefore, staff concludes that there will be few, if any, program eligible public housing locations.⁴⁵ The CPUC has not received any infrastructure projects since October 2016. Assuming no further eligible public housing applications, the unallocated funds in the Public Housing Account, pursuant to statute will be transferred to the CASF Broadband Infrastructure Account by December 31st, 2020.⁴⁶

CASF Public Housing Broadband Account Plans for 2019 and Beyond

- Monitoring all the 267 completed projects and the 63 on-going projects through completion and post completion
- Data analysis on 2018 and earlier projects quarterly reporting data
- Identifying the non-compliant projects in view of post-project reporting; performing site visits to validate compliance.
- Review project completion reports for remaining ongoing projects; site visits as required before releasing payments
- Work closely with Public Housing Account grantees to bring back on track all non-compliance and problematic sites
- Providing technical, operational health check and maintenance recommendations to grantees observed during site visits. Help them to follow best practices

⁴⁴ D.14-12-039, CASF Broadband Public Housing Account Application Requirements and Guidelines, Appendix B, p. B14, which requires the applicant to identify its bandwidth source, either at the Minimum Point of Entry or its wireless equivalent.

⁴⁵ This same finding was explained in the last CASF Annual Report (January 2016-December 2016), submitted April 2017, p. 20. Available at http://ftp.cpuc.ca.gov/Telco/CASF/Reports%20and%20Audits/CASF%202016%20Annual%20Report_.pdf

⁴⁶ Pub. Util. Code 2816(7).

- Streamlining quarterly reports by automation thru web portal and improving the database systems for generating reports
- Build Site Visit Checklist template to use during the site visits to measure the network services performance and grant compliance
- Modify the project completion report template to improve supporting documentation on post completion of the project

Broadband Adoption Account

AB 1665 added the Broadband Adoption Account (Adoption Account) to provide grants to increase publicly available or after-school broadband access and digital inclusion. Eligible applicants include local governments, senior centers, schools, public libraries, nonprofit organizations, and community-based organizations with programs that increase publicly available or after-school broadband access and digital inclusion, such as digital literacy training programs. AB 1665 also requires the CPUC to give preference to programs in communities with demonstrated low broadband access, including low-income communities, senior communities, and communities facing socioeconomic barriers to broadband adoption.

Further, AB 1665 authorizes Publicly Supported Communities to be eligible to apply for funding from the Adoption Account only after all funds available for adoption projects from the Broadband Public Housing Account have been awarded.

Approved Rules

By Decision 18-06-032 the CPUC adopted the initial rules, application requirements and guidelines for the Adoption Account.⁴⁷ Consistent with AB 1665, the Adoption Account may include:

- Digital inclusion projects providing digital literacy training and public education to communities with limited broadband adoption.
- Broadband access projects providing publicly available or after-school broadband access, including free broadband access in community training rooms or other public spaces, such as local government centers, senior citizen centers, schools, public libraries, nonprofit organizations, and community-based organizations.

⁴⁷ Decision 18-06-032 also established the first program application grant cycle. Based on its experience with the first cycle, the Commission in Decision 19-02-008 made modifications to the Adoption Account application requirements and guidelines.

These projects may also include community outreach, such as analysis, comparison of Internet plans with the community, and call centers that will increase broadband access and adoption.

The CPUC authorized staff to approve applications through expedited review that meet specified criteria.⁴⁸ Where an application does not meet the expedited review criteria, it may still be considered for a grant, but it must go through the CPUC Resolution approval process.

Total Awards Since Inception of Adoption Account

The Adoption Account is authorized \$20 million.⁴⁹ Pursuant to AB 1665, the CPUC began accepting applications for grants from the Adoption Account on July 1, 2018, with a deadline for the application cycle of August 31, 2018. The CPUC also set a \$5 million cap for the first application window as a pilot to determine the effectiveness of the Adoption Account strategy and assess demand for adoption funds.

For the first application cycle, the CPUC received applications for 66 projects requesting \$8.4 million. Of the 66 project applications, 45 were for Digital Literacy projects and 20 were for Broadband Access projects, and one was not identified. The CPUC awarded the first round of Adoption grant funds on December 31, 2018. Tables 20, below, summarizes the applications received and the amount of grants approved between January 2018 and March 2019.

Table 20: Summary of Projects

Applicant Project Determination	# of Projects	Grant Request	Grant Award
Approved via Expedited Review on 12/31/2018	47	\$3,620,275	\$2,605,647
Approved via Resolution T-17650 on 3/14/2019	3	\$1,913,195	\$1,308,336
Approved but Declined to accept grant award	1	\$50,000	
Deferred (Per Resolution T-17650) until later date	3	\$944,051	
Denied (Reason: Did not meet goals of the program)	1	\$66,750	
Denied (Reason: Incomplete Application)	11	\$1,762,872	
Grand Total	66	\$8,357,142	\$3,913,983

⁴⁸ D. 18-06-032, Appendix 1, p. 11.

⁴⁹ This includes the additional \$10 million authorized in AB 1665.

Table 21, below, summarizes 50 approved projects consisting of 47 projects approved by expedited review on December 31, 2018, and three projects approved by resolution T-17650 on March 14, 2019.

Table 21: Summary of Approved Projects

	Grantee	Project Name	Project Type	Grant Amount	Approval Date	Completion Date
1	Allen Temple Leadership Institute	Digital Inclusion for All	Digital Literacy	\$147,874	3/14/2019	9/14/2021
2	California State University, Fresno Foundation	Fresno State Parent University – Fresno County	Digital Literacy	\$71,516	12/31/2018	6/30/2021
3	California State University, Fresno Foundation	Fresno State Parent University – KERN COUNTY	Digital Literacy	\$71,516	12/31/2018	6/30/2021
4	California State University, Fresno Foundation	Fresno State Parent University – MADERA COUNTY	Digital Literacy	\$71,516	12/31/2018	6/30/2021
5	California State University, Fresno Foundation	Fresno State Parent University – KINGS COUNTY	Digital Literacy	\$71,516	12/31/2018	6/30/2021
6	California State University, Fresno Foundation	Fresno State Parent University – MERCED COUNTY	Digital Literacy	\$71,516	12/31/2018	6/30/2021
7	California State University, Fresno Foundation	Fresno State Parent University – STANISLAUS COUNTY	Digital Literacy	\$71,516	12/31/2018	6/30/2021
8	California State University, Fresno Foundation	Fresno State Parent University – TULARE COUNTY	Digital Literacy	\$71,516	12/31/2018	6/30/2021
9	California State University, Fresno Foundation	Fresno State Parent University – SAN JOAQUIN COUNTY	Digital Literacy	\$71,516	12/31/2018	6/30/2021
10	Catholic Charities of Los Angeles	Digital Education Center	Digital Literacy	\$83,248	12/31/2018	6/30/2021
11	City of Sunnyvale	Latino Digital Literacy – Bishop Elementary School	Digital Literacy	\$58,033	12/31/2018	6/30/2021
12	City of Sunnyvale	Latino Digital Literacy – Columbia Middle School	Digital Literacy	\$58,033	12/31/2018	6/30/2021
13	City of Sunnyvale	Latino Digital Literacy – Ellis Elementary School	Digital Literacy	\$40,657	12/31/2018	6/30/2021
14	City of Sunnyvale	Latino Digital Literacy – Lakewood Elementary School	Digital Literacy	\$40,657	12/31/2018	6/30/2021
15	City of Sunnyvale	Latino Digital Literacy – San Miguel Elementary	Digital Literacy	\$58,033	12/31/2018	6/30/2021
16	City of Sunnyvale	Latino Digital Literacy – Vargas Elementary School	Digital Literacy	\$58,033	12/31/2018	6/30/2021

	Grantee	Project Name	Project Type	Grant Amount	Approval Date	Completion Date
17	Contra Costa County Library – El Sobrante Library	El Sobrante Library Reconstruction	Broadband Access	\$27,588	12/31/2018	6/30/2021
18	Empowering Success Now	Bilingual Digital Literacy	Digital Literacy	\$78,397	12/31/2018	6/30/2021
19	Hartnell College	Digital Literacy in King City	Digital Literacy	\$59,127	12/31/2018	6/30/2021
20	Hartnell College	Digital Literacy in Castroville	Digital Literacy	\$60,402	12/31/2018	6/30/2021
21	Inglewood Public Library – Children’s Services	Inglewood Public Library Digital Literacy Project	Digital Literacy	\$19,412	12/31/2018	6/30/2021
22	Monument Impact	Conectate y Avanza (Connect and Advance)	Digital Literacy	\$84,297	12/31/2018	6/30/2021
23	Neighborhood Housing Services of Los Angeles County (NHS)	NHS Tech Lab at The Center	Broadband Access	\$51,755	12/31/2018	6/30/2021
24	Nevada County Library	Public Access Upgrade, Madelyn Helling Library	Broadband Access	\$20,075	12/31/2018	6/30/2021
25	Nevada County Library	Public Access Upgrade, Grass Valley Library	Broadband Access	\$23,152	12/31/2018	6/30/2021
26	Nevada County Library	Public Access Upgrade – Truckee Library	Broadband Access	\$19,403	12/31/2018	6/30/2021
27	Nevada County Library	Public Access Upgrade – Penn Valley Library	Broadband Access	\$23,152	12/31/2018	6/30/2021
28	Oakland Adult and Career Education (OACE)	Mobile Classroom – Oakland Adult and Career Education (OACE)	Digital Literacy	\$8,883	12/31/2018	6/30/2021
29	Oakland Unified School District	Get Connected Oakland – OUSD District 5 High Schools	Broadband Access	\$47,655	12/31/2018	6/30/2021
30	Oakland Unified School District	Get Connected Oakland – OUSD District 6 High Schools	Broadband Access	\$47,655	12/31/2018	6/30/2021
31	Oakland Unified School District	Get Connected Oakland – OUSD District 7 High Schools	Broadband Access	\$47,647	12/31/2018	6/30/2021
32	Opportunity Junction	Technology Center	Digital Literacy	\$39,243	12/31/2018	6/30/2021
33	Reading and Beyond	RaB Digital Literacy 1.0 (Mosqueda)	Digital Literacy	\$73,639	12/31/2018	6/30/2021
34	Reading and Beyond	RaB Digital Literacy 1.0 (N Location)	Digital Literacy	\$73,639	12/31/2018	6/30/2021
35	Reading and Beyond	RaB Broadband Access (Mosqueda)	Broadband Access	\$40,472	12/31/2018	6/30/2021

	Grantee	Project Name	Project Type	Grant Amount	Approval Date	Completion Date
36	Reading and Beyond	RaB Broadband Access 1.0 (N Location)	Broadband Access	\$40,472	12/31/2018	6/30/2021
37	Scholar Match	Project Connect	Broadband Access	\$94,963	12/31/2018	6/30/2021
38	Southeast Community Development Corporation	Bell Tech Center – Digital Literacy	Digital Literacy	\$83,466	12/31/2018	6/30/2021
39	Southeast Community Development Corporation	Bell Tech Center – Broadband Access	Broadband Access	\$12,685	12/31/2018	6/30/2021
40	Southeast Community Development Corporation	Whittier Tech Center – Digital Literacy Project	Digital Literacy	\$83,466	12/31/2018	6/30/2021
41	Southeast Community Development Corporation	Whittier Tech Center – Broadband Access	Broadband Access	\$12,685	12/31/2018	6/30/2021
42	Tech Exchange	Tech Hub	Broadband Access	\$97,750	12/31/2018	6/30/2021
43	The Stride Center	Stride Digital Literacy	Digital Literacy	\$66,842	12/31/2018	6/30/2021
44	United Ways of California	Connecting Californians to Affordable, High-Speed Internet	Broadband Access	\$1,051,380	3/14/2019	9/14/2021
45	Vietnamese American Community Center of the East Bay (VACCEB)	Vietnamese Community Digital Equity	Digital Literacy	\$109,081	3/14/2019	9/14/2021
46	Women’s Audio Mission	Girls on the Mic: Digital Literacy & Technology Training for Girls	Digital Literacy	\$77,550	12/31/2018	6/30/2021
47	Youth Policy Institute	LA Promise Neighborhood Digital Literacy, FamilySource Center (FSC)	Digital Literacy	\$73,702	12/31/2018	6/30/2021
48	Youth Policy Institute	LA Promise Neighborhood Digital Literacy, YouthSource Center (YSC)	Digital Literacy	\$40,664	12/31/2018	6/30/2021
49	Youth Policy Institute	LA Promise Neighborhood Digital Literacy, San Fernando Garden (SFG)	Digital Literacy	\$54,485	12/31/2018	6/30/2021
50	Youth Policy Institute	LA Promise Neighborhood Digital Literacy, WorkSource Center (WSC)	Digital Literacy	\$52,506	12/31/2018	6/30/2021
Total				\$3,913,983		

Adoption Account Projects Awarded in 2018

There were 47 new awards in 2018. Of the 50 projects approved between December 31, 2018 and March 14, 2019, 34 are Digital Literacy projects, and 16 are Broadband Access projects. Together, these projects will provide digital literacy training to 14,700 participants and broadband access to 85,600 participants.

Reimbursements to Adoption Account Recipients in 2018

Since the Adoption Account is a new account, there were no reimbursements to Adoption Account recipients in 2018.

Adoption Account Expected Benefits

AB 1665 does not establish a numerical adoption goal and no conclusions can be drawn as to the effectiveness of the awarded grants in 2018 since the grants were just awarded on December 31, 2018. The CPUC will report Adoption Account benefits in the 2019 CASF Annual Report. To address potential progress of the program, the staff is conducting an Adoption Gap Analysis, scheduled to be published by July 1, 2019. The progress of the adoption projects can be evaluated alone and relative to the adoption within California generally, and within the various consortia regions. As of December 31, 2017, the broadband household adoption rate is 87.3% (see Attachment E). In 2016, the broadband household adoption rate was 84.1%.⁵⁰ There has been an increase in adoption of 3.2 percentage points between the two years prior to the adoption account being operational. Map 5, below, contains the locations of the adoption projects.

⁵⁰ The 84.1% is the result of 10,797,571 consumer connections divided by 12,835,308 households having broadband available as of December 31, 2017.

Efforts to Leverage Non-CASF Program Funds

Leveraging Federal Funds

Pub. Util. Code section 914.7(a)(12) and (13) requires reporting on the amount of funding expended from the CASF funds to match federal funds and any additional efforts to leverage non-CASF fund moneys.

There has been no further leveraging of CASF Infrastructure Account funds with non-CASF program funds since that reported in prior CASF annual reports.⁵¹

The Adoption and Public Housing Adoption Accounts fund up to 85 percent of program costs for projects with a requirement that the remaining amount to be matched by other non-CASF funds. The Consortia Account requires each consortium budget to expressly exclude any costs for activities or programs funded from other sources.

FCC's CAF Phase II Program

The FCC has awarded carriers serving California funding for 283,517 locations which were found to lack broadband infrastructure capable of delivering 10 Mbps downstream and 1 Mbps upstream service. A total of 8 carriers have taken advantage of this funding opportunity. Under the program, all CAF Phase II eligible locations are to be upgraded by 2028, with most upgrades mandated for completion by 2022.⁵²

The Connect America Fund (CAF II) provides recurring, time limited subsidies to eligible locations identified by the FCC.

However, AB 1665 prohibits CASF funding in census blocks with CAF II awarded locations, until July 1, 2020, except when the provider receiving CAF support applies to CASF to build beyond its CAF awarded locations, or enhance its CAF-funded networks in those same Census blocks.⁵³ Recognizing this, the CPUC has recommended that broadband providers with CAF II accepted locations build out expeditiously and required providers to report progress annually, prior to the new CASF Infrastructure Grant application

⁵¹ The CASF Annual Report, January 2016 – December 2016 (Issued April 2017), page 31, notes that with an investment of \$37 million in CASF funds, California has been able to leverage \$155 million in federal matching funds from the American Recovery and Reinvestment Act of 2009 (ARRA) for broadband deployment in the State. See <http://www.cpuc.ca.gov/General.aspx?id=9226>.

⁵² Includes CAM 4.3 and Auction 903 data, FCC at <https://www.fcc.gov/general/connect-america-fund-caf>.

⁵³ Pub. Util. Code § 281(f)(5)(C)(ii).

deadlines on each April 1st.⁵⁴ Specifically, providers must submit a report that details the completed CAF II blocks, the census blocks with locations to which the provider has elected not to build (and therefore may be eligible for CASF funding) and the blocks to which the provider has not determined if it will build. This report is submitted annually on January 15th to allow time for competitors and incumbents to formulate CASF infrastructure grant applications by the April 1st application deadline.

The statutory CAF II protections, to date, have not resulted in incumbent provider projects that leverage both CASF and CAF funds. Few project areas have been released from CAF commitments for use with CASF funds. In addition, the CAF II prohibition from competing providers is causing delay and uncertainty because some communities having unmet service needs would like to pursue a CASF application but cannot until after July 1, 2020.

Map 7 below, depicts the CASF program eligible areas (in goldenrod) and the census blocks having CAF identified locations in California (in crosshatch). Areas that are both goldenrod and crosshatched indicates eligibility only to the recipient of CAF II funding. The crosshatch areas show where the AB 1665 CAF II prohibition defers to the CAF II recipient to build adequate broadband service. However, it is unclear whether these commitments will be fulfilled.

⁵⁴D.18-12-018, page 58.

Attachments A Through E

Attachment A: Approved CASF Infrastructure Projects

#	Recipient	Project Name	Last Mile or Middle-Mile	County	Approval Date	Grant Award	Total HHs	Funds Request /HHs	Total Payments from Inception to 12/31/18	*Subscribed HHs	Complete Date or Ongoing
1	Anza Electric Cooperative, Inc.	Connect Anza Phase 1	Last-Mile	Riverside	5/31/2018	\$2,662,450	3,751	\$710	\$2,662,450	1,230	1/17/2018
2	Anza Electric Cooperative, Inc.	Connect Anza Phase 2	Last-Mile	Riverside	5/31/2018	\$1,796,070	400	\$4,490			
3	AT&T	Alta/Blue Canyon	Last-Mile	Nevada/Placer	12/20/2009	\$56,628	236	\$240	\$56,628	218	5/27/2011
4	AT&T	Blanchard	Last-Mile	Mariposa	11/21/2008	\$35,816	123	\$291	\$24,963	155	5/27/2011
5	AT&T	Comptche	Last-Mile	Mendocino	2/20/2009	\$18,392	97	\$190	\$9,364	112	5/27/2011
6	AT&T	Grenada	Last-Mile	Siskiyou	11/21/2008	\$57,596	275	\$209	\$20,150	142	5/27/2011
7	AT&T	Hopland	Last-Mile	Mendocino	1/21/2008	\$61,952	328	\$189	\$22,306	244	5/27/2011
8	AT&T	Mt. Wilson	Last-Mile	Los Angeles	11/21/2008	\$2,420	15	\$161	\$859	14	5/27/2011
9	AT&T	Warner Springs	Last-Mile	San Diego	11/20/2009	\$93,896	66	\$1,423	\$43,985	157	5/27/2011
10	AT&T	Lodi	Last-Mile	San Joaquin	3/12/2009	\$137,416	35	\$3,926	\$45,541	150	12/1/2010
11	AT&T	Clovis	Last-Mile	Fresno	4/16/2009	\$36,393	125	\$291	\$36,393	89	6/1/2012
12	AT&T	Easton	Last-Mile	Fresno	3/12/2009	\$49,869	9	\$5,541	\$36,354	15	6/1/2012
13	Audeamus	Tranquility and West Fresno	Last-Mile	Fresno	5/6/2010	\$1,154,496	585	\$1,973	\$1,154,494	191	11/21/2011
14	Bright Fiber Network, Inc. (Race Telecom)	Bright Fiber	Last-Mile	Nevada	12/3/2015	\$16,086,789	1,941	\$8,288			
15	Calaveras Telephone Co	Poker Flat Project	Last-Mile	Calaveras	7/29/2010	\$640,698	409	\$1,566	\$527,676	299	7/7/2016
16 a*	Cal.Net	El Dorado North	Last-Mile	El Dorado	1/14/2016	\$1,139,755	1,537	\$742	\$429,647		
16 b*	Cal.Net	El Dorado North Supplemental ICEQA funding	Last-Mile	El Dorado	8/1/2018	\$98,795			\$98,795		
17	Cal.Net	El Dorado South	Last-Mile	El Dorado	6/23/2016	\$1,256,524	1,350	\$931			

#	Recipient	Project Name	Last Mile or Middle-Mile	County	Approval Date	Grant Award	Total HHs	Funds Request /HHs	Total Payments from Inception to 12/31/18	*Subscribed HHs	Complete Date or Ongoing
18	Cal.Net	Amador Calaveras and Alpine	Last-Mile	Amador Calaveras Alpine	11/15/2016	\$2,862,388	4,878	\$587			
19	Cal.Net	Tuolumne Mariposa	Last-Mile	Tuolumne & Mariposa	12/15/2016	\$3,608,224	7,711	\$468			
20	CalNeva Broadband LLC	Fresno Co Coalinga, Huron Gigabit Project	Last-Mile	Fresno	5/11/2017	\$511,170	5,480	\$93	\$110,648		
21	CVIN LLC & CENIC**	CVIN & CENIC fiber-optics network	Middle-Mile	Multiple	12/3/2009	\$6,659,967	0		\$6,312,983		5/31/2014
22	Foresthill Telephone Company	Big Dipper	Last-Mile	Placer	10/3/2013	\$117,000	84	\$1,393	\$117,000		10/1/2015
23	Citizens Telecom. Of California, Inc.	Birds Landing	Last-Mile	Solano	3/12/2009	\$100,444	69	\$1,456	\$99,130	11	3/10/2010
24	Citizens Telecom. Of California, Inc.	Livingston	Last-Mile	Merced	3/12/2009	\$62,000	308	\$201	\$39,555	42	11/15/2009
25	Citizens Telecom. Of California, Inc.	Prattville	Last-Mile	Lake Almanor, Plumas	11/21/2008	\$41,192	171	\$241	\$9,923	42	5/28/2011
26	Citizens Telecom. Of California, Inc.	Shingletown	Last-Mile	Shasta	9/29/2016	\$545,690	1,017	\$537	\$454,825	890	5/19/2017
27	Citizens Telecom. Of California, Inc.	Petrolia	Last-Mile	Humboldt	7/23/2015	\$202,557	138	\$1,468	\$202,557		2/3/2016
28	Frontier Comm. Of the West Coast	Del Norte	Last-Mile	Del Norte	9/22/2011	\$68,168	645	\$106		59	4/10/2014
29	Frontier Comm. Of the Southwest	Alpine	Last-Mile	Alpine	9/22/2011	\$95,919	623	\$154		423	4/10/2014
30	Frontier Comm. Of the Southwest	Havasu Palms and Black Meadow	Last-Mile	San Bernardino	6/10/2011	\$168,171	3,732	\$45		182	4/10/2014
31	Frontier California	Lytle Creek	Last-Mile	San Bernardino	7/12/2018	\$1,458,886	339	\$4,303			
32	Frontier California	Desert Shores	Last-Mile	Imperial	7/12/2018	\$1,262,567	596	\$2,118			

#	Recipient	Project Name	Last Mile or Middle-Mile	County	Approval Date	Grant Award	Total HHs	Funds Request /HHs	Total Payments from Inception to 12/31/18	*Subscribed HHs	Complete Date or Ongoing
33	TDS Happy Valley Telephone Co.	Olinda	Last-Mile	Shasta	10/3/2013	\$1,833,689	1,908	\$961			
34	Inyo Networks	Nicasio	Last-Mile	Western Marin Co	(expected addl enviro cost)	\$462,978					
35	Inyo Networks	Digital 299	Last-Mile	Shasta, Trinity, Humboldt	7/14/2016	\$1,491,078	216	\$6,903			
36	Inyo Networks	Bolinas	Last-Mile	Marin Co.	3/23/2017	\$46,709,036	307	\$152,147			
37	California Broadband Cooperative (Inyo Networks)	† Digital 395	Middle-Mile	Mono, Inyo and Eastern San Bernardino	5/10/2018	\$1,868,881	571	\$3,273			
38	IP Networks	† Hwy 36 Humboldt-Trinity Counties	Middle-Mile	Humboldt & Trinity	12/3/2009	\$29,223,432	28,127	\$1,039	\$26,955,420		9/1/2015
39	Karuk Tribe	Klamath River Rural Broadband Initiative	Last-Mile	Humboldt	11/20/2009	\$5,753,240	527	\$10,917	\$5,753,240		1/2/2012
40	LCB Comm.	Light Saber	Last-Mile	Santa Clara	10/17/2013	\$6,602,422	616	\$10,718			
41	MCC Telephony	Kernville Teleconnect	Last-Mile	Kern	6/15/2017	\$1,076,062	150	\$7,174			
42	Pinnacles Telephone Company	Pinnacles Monument	Last-Mile	San Benito	9/9/2010	\$285,992	9,179	\$31			
43	Plumas Sierra Telecom	† Plumas-Sierra Telecom middle mile	Middle-Mile	Plumas, Lassen and Sierra	10/31/2013	\$195,299	47	\$4,155	\$180,277		12/4/2014
44	Ponderosa Cablevision	Auberry project	Last-Mile	Fresno	2/25/2010	\$1,721,280	13,000	\$132	\$1,721,280	359	3/11/2014
45	Ponderosa Telephone	Big Creek	Last-Mile	Fresno	10/31/2013	\$1,154,780	1,043	\$1,107	\$614,118	32	5/19/2014
46	Ponderosa Telephone	Cressman	Last-Mile	Fresno	4/10/2014	\$898,574	79	\$11,374	\$692,952	33	6/30/2017
47	Ponderosa Telephone	Beasore-Central Camp	Last-Mile	Medera	12/19/2013	\$1,027,380	70	\$14,677	\$911,972		9/4/2018
48	Race Telecom	Mojave Air and Space Port Project	Last-Mile	Kern	6/24/2010	\$1,755,042	32	\$54,845			
49	Race Telecom	Boron	Last-Mile	Kern	12/19/2013	\$506,199	0		\$494,419	460	11/12/2012

#	Recipient	Project Name	Last Mile or Middle-Mile	County	Approval Date	Grant Award	Total HHs	Funds Request /HHs	Total Payments from Inception to 12/31/18	*Subscribed HHs	Complete Date or Ongoing
50	Race Telecom	Kern County High Desert	Last-Mile	Kern	10/17/2013	\$3,426,357	892	\$3,841	\$2,880,819	2,678	4/1/2015
51	Race Telecom	Mono County Underserved	Last-Mile	Mono	6/26/2014	\$12,583,343	4,371	\$2,879	\$10,600,963	425	9/1/2017
52	Race Telecom	Gigafy Backus	Last-Mile	Kern	11/20/2009	\$4,650,593	727	\$6,397	\$3,913,818	132	1/1/2018
53	Race Telecom	Five Mining	Last-Mile	Kern	1/14/2016	\$2,239,991	253	\$8,854	\$1,887,103	58	2/1/2017
54	Race Telecom	Gigafy Mono	Last-Mile	Kern	1/28/2016	\$2,037,721	202	\$10,088	\$2,037,721	248	9/30/2017
55	Race Telecom Race Telecom	Gigafy Occidental	Last-Mile	Occidental	8/18/2016	\$6,580,007	399	\$16,491	\$5,564,690		9/1/2017
56	Race Telecom	Gigafy Phelan	Last-Mile	San Bernardino	7/13/2017	\$7,687,016	458	\$16,784			
57	Race Telecom	Gigafy North 395	Last-Mile	Kern	12/1/2016	\$27,629,599	7,606	\$3,633	\$11,353,779		
58	Sunesys, LLC	† Connected Central Coast	Middle-Mile	Santa Cruz and Monterey	4/10/2014	\$3,124,490	444	\$7,037	\$3,124,490		
59	Surfnet Comm.	Paradise Road	Last-Mile	Monterey	4/10/2014	\$10,640,000	11,124	\$956	\$5,596,943		5/10/2018
60	Siskiyou Tele	† Happy Camp to Somes Bar	Hybrid	Siskiyou	12/15/2016	\$177,954	278	\$640			
61	Ultimate Internet Access	Helendale	Last-Mile	San Bernardino	5/27/2015	\$3,645,085	37	\$98,516		1,086	
62	Ultimate Internet Access	Wrightwood	Last-Mile	San Bernardino, Los Angeles	5/27/2015	\$1,813,937	2,279	\$796	\$1,812,759	669	3/19/2017
63	Willits Online	Covelo & Laytonville	Last-Mile	Mendocino	3/12/2009	\$1,937,380	1,857	\$1,043	\$1,667,981	520	3/13/2018
64	Willits Online	Boonville	Last-Mile	Mendocino	10/31/2013	\$108,000	800	\$135	\$102,025	5	5/13/2016
65	Winterhaven Telephone Co (TDS Telecom)	Winterhaven	Last-Mile	Imperial	10/3/2013	\$122,931	605	\$203	\$122,652		12/1/2015
Grand Total						\$236,184,034	126,238	\$1,871	\$101,792,933		

*Subscribed HHs are completed projects with subscriptions to the provider's broadband service.

**Central Valley Independent Network, LLC (CVIN) and Corporation for Educational Network Initiatives in California (CENIC).

Attachment B: 2018 Consortia Account Reported Benefits⁵⁵

Central Coast Broadband Consortium

Outcomes in Access and Adoption

- 2 adoption grants given to Hartnell College – digital literacy grants: \$59,000 for Castroville and \$60,000 for King City.
- Held 3 meetings with local/state Decision Makers in Santa Cruz, Monterey and San Benito Counties

Outcomes in Deployment

- Updated online map for CCBC with revised eligibility criteria
- Conducted monthly conference calls with consortium
- Participated in CPUC proceeding that revised CASF rules per AB1665; provided comments and feedback regarding effective infrastructure grant rules
- Updated mapping for region
- Maintained the online platform for mapping
- Conducted primary research in our tri-county region to understand broadband services offered and needs for residences and businesses
- Reached agreement with policy makers and influencers to establish a regional broadband standard of 100 Mbps download/20 Mbps upload
- Published white paper outlining regional needs and coverage to promote broadband proliferation
- Conducted 2 monthly calls, 4 quarterly meetings and 3 ad hoc meetings with policy makers, ISPs and other constituents; participated in infrastructure summit
- City of Watsonville provided fiscal agent support
- Assisted existing CASF grantees in project development and completion
- 4 meetings with educational institutions, nonprofits and businesses and following outreach activities as described led to following outcomes:
 - Collaboration with key regional players on broadband needs
 - Understanding barriers to entry of independent ISPs in proliferation of high-speed service
 - Assisted Charter Communications with their CPUC upgrade obligations in Monterey County

Central Sierra Connect

Outcomes in Access and Adoption

- Internet Literacy Courses delivered 2 hours per course to 10 individuals
- Held 21 meetings with local/state Decision Makers resulting in broadband policies in the following geographic areas/topics: Amador, Calaveras, Tuolumne, Mariposa Counties regarding infrastructure expansion and funding, and adoption.

Outcomes in Deployment

- Participated in developing 2 Broadband infrastructure applications in following locations: Amador and Calaveras counties.
- List Broadband infrastructure plans promoted, adopted: assisted with EDA feasibility grant application, as well as with USDA grants in Tuolumne County.

⁵⁵ Consortia recipients of CASF funding for 2016 were requested to report to the CPUC what each consortium has accomplished to improve broadband access, adoption and deployment in 2018. This self-reported information is what is presented here. California One Million NIU and San Diego/Imperial Consortia are not listed because they did not receive funding in 2018.

- 4 meetings with Tuolumne County and Amador County, and following outreach activities: evaluated broadband availability throughout the county, working with county leaders to develop plans to push for better access.

Connected Capital Area Broadband Consortium

Outcomes in Access and Adoption

- Held 15 meetings with local/state Decision Makers resulting in broadband policies in the following geographic areas/topics:
 - Pilot project to provide access to computers and digital skills training in low performing schools. Leatata Floyd Elementary School is being considered for a district-wide expansion
 - Broadband access for rural California elevated as a policy priority for the 2018 California Economic Summit
 - Partnership with Sacramento County Public Library and City of Sacramento on Digital Inclusion Initiative

Outcomes in Deployment

- Yolo County Broadband Strategic Plan
- City of West Sacramento Broadband Assessment & Action Plan
- City of Davis Broadband Advisory Taskforce
- El Dorado County Broadband Feasibility Study
- Supported adoption activities in priority areas including: Sacramento Land Park (Marina Vista & Alder Grove Communities) South Sacramento and Del Paso Heights
- 75+ meetings with community leaders and following outreach activities
- One-on-One outreach meetings sharing information on served and unserved areas within specific jurisdiction
- Yuba Sutter broadband forum (March 2018)
- Sacramento region broadband forum (November 2018)
- Two small cell workshops (August and November 2018)
 - Broadband access for rural California elevated as a policy priority for the 2018 California Economic Summit
 - Partnership with Sacramento County Public Library and City of Sacramento on Digital Inclusion Initiative
 - Heightened awareness, and community and civic leadership engagement on identifying and addressing broadband infrastructure and adoption challenges

East Bay Broadband Consortium

Outcomes in Access and Adoption

- Tech Exchange received 6,413 computers from 232 corporations, agencies and non-profit organizations. Established agreement with San Leandro to donate used computers and for Tech Exchange to donate to low-income families in San Leandro.
- Promotion accomplished through partnerships with schools, non-profit organizations.
- 42 Tech Fairs held.
- 2738 families received free computers, digital literacy training and tech support and 620 families signed up for Broadband subscriptions.
- Tech Equity hosted 5 forums, launched its Corporate Partners Program to help tech works find volunteer opportunities.
- Tech Ed Non-Profits in Neighborhood Venues: Program modified to establish a central Tech Hub with satellite programs in neighborhoods. Lease signed for Tech Hub and applications submitted for 3 satellite locations.

- Participated in Tech Hire Oakland in mapping training, measuring impact, strengthening partner capacity, engaging employers, boosting community awareness, sharing best practices. Participated with Tech Exchange in Sprint's One Million Project to distribute 3200 free mobile devices and free data plans to Oakland students.
- Held very successful 5th Summit, with over 100 attendees. Keynote by Sunne Wright McPeak and panels on Digital Inclusion Solution and Smart Cities initiatives.

Inland Empire Regional Broadband Consortium

Outcomes in Access and Adoption

- Outreach to Cities, Riverside and San Bernardino Counties, Public Agencies, and Professional Organizations
- IERBC collaboration with Inland Empire Economic Partnership (IEEP)
- Consultation with Cities and Riverside and San Bernardino Counties; Outreach to Regional Transportation and Planning Agencies; and, Outreach to Civil Engineering, Information Technology and Planning Associations
- Riverside County utilized SmartRiverside Model and created a County-wide Digital Equity Program; Information was provided to San Bernardino County.

Outcomes in Deployment

- Supported broadband projects and connections from Digital 395 and Supported San Bernardino County including Digital 395 in its GIS System
- IERBC supported CASF Broadband Infrastructure and Adoption Grants in the Inland Empire Region

Inyo Mono

Outcomes in Access and Adoption

- Continued work on the Eastern Sierra Broadband Access Tool - an online interactive application which is designed to help get residents and businesses connected with the best available broadband based on their physical location.
- Held 4 meetings with local/state Decision Makers
- Initial plans for provider partnership efforts to close service gaps in Mono County. Working on a prioritization plan for Inyo County.

Outcomes in Deployment

- Working with local providers to evaluate next round of funding opportunities and applicability of that funding to remaining communities in Mono & Inyo County. Updated community priorities have been discussed with provider and planning is underway.
- Mono County is actively working with Race Communications to help build out capacity in areas adjacent to those which they received CASF grant money to build.
- Counties have been meeting with Race Communications and California Broadband Cooperative to discuss remaining priority communities which are still underserved in both counties. Information has been provided to these providers and conversations are underway regarding strategies to accomplish deployment within.

Los Angeles County Regional Broadband Consortia (January – June 2018)

Outcomes in Access and Adoption

- Provided 91 individuals with informative workshops
- Conducted 2 Telehealth workshops
- Collected "Demographic, Deployment and Adoption" surveys from 332 individuals
- Provided 613 users with open lab
- Attended 1 quarterly meeting with subregion leads
- Hosted and/or participated in 3 community events

- Distributed 448 pieces of broadband literature
- Distributed 1,220 pieces of outreach materials
- Assist 118 LA County Residents in adopting the use of the internet

North Bay North Coast Broadband Consortium

Outcomes in Access and Adoption

- Held 30+ meetings with local/state Decision Makers resulting in broadband policies in the following geographic areas/topics: Communities in Marin, Mendocino, Napa and Sonoma Counties; Strategic Plans, Dig One Policy, Infrastructure Projects, Adoption Program
- Although Mendocino was the only county to include Adoption activities in its CASF funded work plan, the other three counties did engage with other involved community organizations.
- The Mendocino team used a limited amount of CASF grant funds to:
 - promote Comcast and AT&T adoption programs;
 - conduct extensive outreach to all potential applicants for the CASF adoption program grant;
 - promote adoption programs offered by the local county library branches;
 - promote digital training available for business owners through the west county;
 - improve the website as an educational resource for consumers by adding "Consumer Education" page that offers relevant content for access and adoption;
 - continue to update the consumer education blog "Crossing the Digital Divide" with 140 blog articles by December 2018;
 - reach out to libraries; and,
 - update the 2015 Adoption Report for access information for local residents.
- The Sonoma team leveraged:
 - Russian River Rotary, Sonoma State University and River to Coast Children Services to provide introductory computer classes in Spanish to over 200 Hispanics in the Lower River Area at Guerneville School;
 - West County Community Services and the Russian River Senior Center to provide Intro to Computer classes monthly; and,
 - AT&T support to provide introduction to iPads to seniors at the Russian River Senior Center.
- Over the past two years the Marin Team has had the responsibility to support broadband adoption programs, with funding from the county budget. There are three (3) target communities for adoption programs including: The Canal Area neighborhood in San Rafael, the Hamilton section of Novato, and Marin City in the unincorporated area of Southern Marin. The Marin team continues to look for grant funding to launch a combination broadband infrastructure build and adoption project for the Canal Area.
- In addition to the Farm Work project mentioned earlier, the Napa County library carries out an ongoing computer literacy program that will help broadband adoption.

Outcomes in Deployment

- Participated in developing one Broadband CASF infrastructure applications in following locations: Bolinas-Marin; and three Farm Worker Centers-Napa. The areas in Mendocino that local WISPs provided services to without CASF funds included: Westport, Gualala, Rancho Navarro, and Albion.
- 30-40 meetings and related communications with community groups and following outreach activities led to following outcomes: two countywide strategic plans; one county fiber Infrastructure engineering assessment report; and a three-county outage report as a result of the 2017 wildfires.

- Two Countywide Strategic Broadband Plans Produced—Mendocino and Sonoma county teams developed strategic plans that will help county government guide future deployment of broadband infrastructure and services throughout their counties.
- Mendocino formed a working group that met regularly to: 1) develop the goals, 2) host nearly a dozen presentations at community outreach meetings around the county, 3) send information via email to a mailing list of 400. In addition, the Mendocino team conducted three surveys; a residential broadband access survey, a non-residential broadband access survey (businesses, community and anchor institutions), and a survey of Internet service providers in Mendocino County. The results of the surveys were used to develop the plan, to create a better understanding of the current level of access, and to develop target areas for future projects. The result is the Mendocino County Digital Infrastructure Plan: 2019-2025.
- The Sonoma team and its consultant hosted 10 public meetings, three (3) advisory committee meetings, and dozens of phone call interviews and several in person meetings with industry, anchor institutions and county departments. The result is the Sonoma County Broadband Strategic Plan.
 - Three CASF Infrastructure Grant-Funded Projects—With assistance from NBN/CBC county teams in Marin and Sonoma three of four CASF Infrastructure grant applications were funded.
 - The Inyo Networks Nicasio project (Marin) is nearing completion.
 - The Race Communications Gigafly Occidental project (Sonoma) is operational.
 - The Inyo Networks Bolinas project (Marin) has been launched.
- The Marin team's assistance included identifying and assisting the provider developing the grant application and working with the communities and provider on financing plans. The Sonoma team's assistance involved identifying the provider and working with the community to secure the customer service commitments necessary to underwrite the match grant funds.
 - Non-CASF Funded Infrastructure Projects—The Mendocino county team worked with local providers to bring broadband services to remote communities including:
 - Further Reach, a non-profit, has implemented fixed wireless infrastructure that currently serves customers from Little River to Gualala. They are working on bringing the same level of services to Comptche, Rancho Navarro and Anderson Valley.
 - SeaKay, a non-profit fixed wireless provider, serves Westport and began service to the western side of Willits. They are considering providing services to other unserved communities in the county.
- The Napa Farm Worker Housing Centers' Access and Adoption Training Project Utilizing less than \$3,000 of CASF grant funds to acquire the necessary equipment, the Napa team has enabled the Napa County Library and Farm Center staffs to provide broadband access and adoption training to as many as 500 migrant workers who reside in the three county-owned and operated farm worker centers throughout the year.
 - Two Assessment Reports Produced as a Result of the October 2017 Wildfires. In the aftermath of the 2017 Northern California wildfires that affected three of four consortium counties, an assessment was made of the impact telecommunication outages had on our residents in a report entitled, Telecommunications Outage Report: Northern California Firestorm 2017. CASF grant funds were not used to conduct this study.
- Using CASF grant funds in 2018, Napa County contracted with Magellan Advisors, LLC for broadband connectivity review. Their goal was an analysis of existing infrastructure, including an overview of connectivity post 2017 fires. The Napa County Fiber Infrastructure Engineering Assessment Report is the first of a four-part study that examines Napa County's infrastructure and ultimately will give the County recommendations for the best avenues to expand it to increase access, speed and resilience in the County.

Northeastern California Connect Consortium

Outcomes in Access and Adoption

- Carried out background work to support local partners in future access and adoption programs. Our consortium carried out the following access and adoption activities as they strongly contribute toward broadband demand aggregation and financial viability of future broadband infrastructure deployments.
- Developed inventory of existing county digital literacy programs and curriculums.
- Mapped anchor institutions for utilization of digital literacy programs and curriculums.
- Identified gaps in digital literacy services and outreached to county leaders for potential partnerships.
- Established framework to position local partners to apply for funding to expand existing or develop new digital literacy programs and curriculums throughout the region.
- Mapped California Telehealth Network (CTN) current customers in all seven counties and generated a list of health clinics and hospitals not connected to CTN.
- Conducted a survey on telehealth services in Alturas and Modoc counties.
- Outreached to non-networked CTN customers.
- Developed telehealth survey to assess current level of service and training needs for behavioral health staff throughout the region.
- In collaboration with all 16 regional broadband consortia, developed Regional Consortia Strategic Broadband Corridors (maps and lists) for the California Transportation Commission's (CTC) Comprehensive Multimodal Corridor Plan Guidelines and presented them to the CTC in October and to the California Broadband Council in November.
- Met and held conference calls with local government staff and elected officials to review general plans to streamline permit processes and develop policies to promote broadband infrastructure deployments.
- Assisted Tehama County in generating initial drafts of dig-once policies and standard specifications; currently under review and carrying out iterations.
- Assisted Shasta and Plumas Counties in reviewing potential policies and updates on general plans; currently in early stage meetings.

Outcomes in Deployment

- Three potential projects were in discussion and development (under confidentiality agreements) but did not get filed yet; applicants were waiting for the final CASF infrastructure grant rulemaking [Final ruling on December 2018]
- Met and held conference calls with local government staff and elected officials of the counties of Butte, Lassen, Modoc, Plumas, Shasta, Siskiyou and Tehama, and cities of Alturas, Chico, Corning, Oroville, Paradise, Rancho Tehama and Red Bluff; additionally carried out a site visit to Rancho Tehama and presented at a town hall meeting in Tehama County
- Carried out quarterly webinars to provide updates on consortium activities and progress made toward broadband expansion, which provided a platform for local partners to ask questions and connect with other local partners
- Revamped consortium website: www.necalbroadband.org
- Fostered partnerships and collaborative work with important broadband stakeholders such as GENIC, CETF, CTN, Caltrans, RCRC, and chambers of commerce across our region
- In collaboration with local governments, developed a social media campaign to promote CalSPEED and broadband needs survey deployment, which led to an increase in CalSPEED measurements across the region for mobile and fixed broadband services
- With CPUC support, carried out mobile broadband testing in Chico and Oroville, towns neighboring the Camp Fire, to assess service failures reported by local government officials; measurement points included first responder agencies, evacuation centers, and fairgrounds
- Worked with experts to generate a survey about availability and adoption of telehealth services in health care institutions in our consortium region

- Supported an ISP (AT&T) in carrying out an informational roundtable in Chico about its coming broadband deployments in Butte County
- Supported CPUC to promote AB1665 CASF Public Forum in Oroville in March, and CalSPEED Home Broadband Study across our consortia region
- Hosted a Broadband Funder/Finance Forum, in January in Oroville, aimed to connect ISPs with broadband infrastructure funding agencies

Broadband Consortium, Pacific Coast

Outcomes in Access and Adoption

- Held nearly 30 meetings with local/state Decision Makers resulting in broadband policies in the following geographic areas/topics: County of Ventura & northern Santa Barbara County / Topics discussed included resolving CPUC Priority Areas & implementation of Dig Once policies.
- Created a partnership with the County Office of Education and the Workforce Education Coalition in anticipation of funding available through CASF Broadband Adoption Account, created via Assembly Bill 1665. Informational Webinar, Thursday, February 07, 2019

Outcomes in Deployment

- Participated in developing Broadband infrastructure applications in following locations:
- Currently working on a tri county application with Digital West with the advocacy and assistance of the chair of the Cuyama Community Services District. Submittal anticipated within 60 days. Also, coordinated with providers and municipalities priority areas identified within their jurisdictions, many of which have now been resolved.
- Continued to conduct regional stakeholder meetings in Ventura County and Northern Santa Barbara County as well as serve as a catalyst for strategic dialogue between municipalities and broadband providers. Coordinated with CPUC the receipt of GIS data of priority areas and created a new layer identifying municipal maps and boundaries. Provided resulting information to cities and provided assistance in resolving.
- At least 19 meetings with public officials (staff and elected) and industry leaders and following outreach activities: regional forums, roundtables, and broadband provider meetings led to following outcomes: (10 Ventura County Advisory Group Meetings, 9 SB-SLO Meetings, 7 Economic Development Roundtable Meetings, 2 Speed Dating Events, 1 Regional Forum, 1 Charter Sponsored Event in Oxnard). The priority area at Point Mugu and within the City of Moorpark has been resolved. The cities of Oxnard and Ventura, and soon the County of Ventura will have contracted with Magellan Advisors for the formal development of a Broadband strategy. Santa Paula is seeking a transformational breakthrough via broadband, and Atascadero is following in the footsteps of Grover Beach and Morro Bay in partnering with Digital West.
- Assembled lists of anchor institutions and coordinated them with municipalities for validation and created a GIS system for visualization.
- Created draft agreements for the partnership and development of a regional network consisting of middle mile connection of community networks. Also provided inputs to Caltrans identifying strategic corridors for fiber deployment.

San Joaquin Valley Regional Broadband Consortium

Outcomes in Access and Adoption

- 10 Internet Literacy Courses delivered 45 hours per course to 215 individuals
- * Received funding for one AgTech pilot site in Kern County. *Facilitated 4 quarterly trainings for farmers/producers to utilize broadband for drones, machines, apps, real time water sensors and inputs management, energy demand and soil conditions. *Received funding to facilitate new internet subscriptions via the Fresno State Call Center. *over 500 new adoptions were established. *Participated in 2 Statewide AgTech Roundtable discussions. *In partnership with regional healthcare providers, adopted new online patient portal into Fresno State Parent University Digital Literacy curriculum.

Outcomes in Deployment

- Participated in developing 2 Broadband infrastructure applications in following locations: West Fresno County and Kern County
- Worked with CETF and CPUC in identifying priority areas in the San Joaquin Valley. All priority areas were identified and mapped accordingly.
- 4 meetings with 20 stakeholders and 2 following outreach activities that generated leads for funding opportunities (feasibility study) and partnership opportunities with West Hills College. Funding is to explore development of a financial model where public or nonprofit entities such as water districts or agricultural cooperatives own wireless network equipment and the network is operated by private internet service providers.
- Obtained funding from USDA for Feasibility Study utilizing existing infrastructure in rural West Fresno. Participated with regional consortia in Caltrans, Air Quality Control Board, Agtech and FirstNet statewide meetings regarding deployment in the San Joaquin Valley and other regions in the state. Participated and presented alongside other regional consortia at the Stakeholders Meeting on Strategic Corridors, hosted by the California Department of Technology. Provided recommendations on strategic priorities for consideration in the Wired Broadband Guidelines as a component in the Caltrans Corridor Planning Guidebook that will capture the intent of the CTC Comprehensive Multimodal Corridor Planning Guidelines.

Southern Border Broadband Consortium

Outcomes in Access and Adoption

- SBBC is working with Spectrum to install five Wi-Fi towers in Imperial County. One location is Downtown Brawley. The SBBC is attending webinars on new mesh technologies available in the area and reaching out to them.
- Held 36 meetings with local/state Decision Makers resulting in broadband policies in the following geographic areas/topics: Imperial and San Diego Counties.

Outcomes in Deployment

- Participated in developing 2 Broadband infrastructure applications in following locations: Assisted Frontier and the CPUC on the same application for a Desert Shores project, and assisted ICOE on a USDA grant application.
- 15 meetings with San Diego CEDS, CETF meetings in Sacramento, San Francisco, and Oakland, webinars, Imperial County Fire Department, IC CEO, NUUO, ICTC, Business Showcase at the IV Expo, Christian Nunez with Garcia's Office, Spectrum, Veg Growers, COLAB, T-Mobile, IC Libraries, and following outreach activities: Bombay Beach District meeting and event, Niland Chamber of Commerce of Meeting, Holtville Farmers Market, Westmorland Community Event. Led to following outcomes: Received completed internet needs questionnaires for data collection purposes. Data is report to CPUC in annual reports. Creating a lot more contacts to assist with infrastructure in our region by attending meeting hosted by CETF and the CPUC.
- SBBC has attended a significant amount of community events this year and plans on attending even more in 2019 to spread the word about our organization as well collect data on their internet needs and report that back to the CPUC.

Upstate California Connect Consortium

Outcomes in Access and Adoption

- Carried out background work to support local partners in future access and adoption programs. Our consortium carried out the following access and adoption activities as they strongly contribute toward broadband demand aggregation and financial viability of future broadband infrastructure deployments.
- Developed inventory of existing county digital literacy programs and curriculums across our consortium region
- Mapped anchor institutions for utilization of digital literacy programs and curriculums

- Identified gaps in digital literacy services and outreached to county leaders for potential partnerships
- Established framework to position local partners to apply for funding to expand existing or develop new digital literacy programs and curriculums throughout the region
- Mapped California Telehealth Network (CTN) current customers in all three counties and generated a list of health clinics and hospitals not connected to CTN
- Outreached to non-networked CTN customers
- Developed telehealth survey to assess current level of service and training needs for behavioral health staff throughout the region
- In collaboration with all 16 regional broadband consortia, developed Regional Consortia Strategic Broadband Corridors (maps and lists) for the California Transportation Commission's (CTC) Comprehensive Multimodal Corridor Plan Guidelines and presented them to the CTC in October and to the California Broadband Council in November
- Met and held conference calls with local government staff and elected officials to review general plans to streamline permit processes and develop policies to promote broadband infrastructure deployments
- Assisted the City of Orland in developing and implementing its Dig-Once Ordinance and Technical Standard Specifications, which were approved and implemented by the city council in May 2018
- Assisted the City of Willows and Glenn County in generating initial drafts of dig-once policies and standard specifications; currently under review and carrying out iterations
- Assisted Lake County in developing policy drafts (currently under review) to be incorporated in coming updates to the county general plan
- Developed business demand survey to assess current level of service, interest in improved service, and impact to business productivity and profitability

Outcomes in Deployment

- One CASF application was filed for a project in the City of Colusa (Colusa County)
- Two potential projects were in discussion and development (under confidentiality agreements) but did not get filed yet; applicants were waiting for the final CASF infrastructure grant rulemaking [Final ruling on December 2018]
- Updated counties' broadband priority areas based on most current CPUC broadband availability data and generated priority area maps; priority area selection criteria included served status, median income, and number of unserved households
- Reached out to local governments for input and feedback on priority areas and needs
- Filed priority areas (August 8th) along with joint comments (CCRP, RCRC, NECCC & UCCC) on the R1210012 CASF Rulemaking Proceeding-Eligibility for and Prioritization
- Developed a Glenn County Master Broadband Plan currently under review by local government staff and elected officials
- Work in progress: Lake County Master Broadband Plan
- Met and held conference calls with local government staff and elected officials of the counties of Colusa, Glenn and Lake, and cities of Orland, Willows, and Williams
- Carried out quarterly webinars to provide updates on consortium activities and progress made toward broadband expansion, which provided a platform for local partners to ask questions and connect with other local partners
- Revamped consortium website: www.upcalbroadband.org
- Fostered partnerships and collaborative work with important broadband stakeholders such as GENIC, CBTE, CTN, Caltrans, RCRC, and chambers of commerce across our region
- In collaboration with local governments, developed a social media campaign to promote CalSPEED and broadband needs survey deployment, which led to an increase in CalSPEED measurements across the region for mobile and fixed broadband services
- Worked with experts to generate a survey about availability and adoption of telehealth services in health care institutions in our consortium region

- Supported CPUC to promote CalSPEED Home Broadband Study across our consortia region
- Hosted a Broadband Funder/Finance Forum, in January in Oroville, aimed to connect ISPs with broadband infrastructure funding agencies

Tahoe Basin

Outcomes in Access and Adoption

- Helped draft a consensus and collaborative Dig Once Policy, The Broadband Infrastructure Installation Policy (Policy J-4).
- El Dorado County Board of Supervisors officially adopted The Broadband Infrastructure Installation Policy (Policy J-4), in December of 2018.
- Attended and Presented Tahoe Basin Project key outcomes and recommendations at the CPUC CASF Summit - March 2018
- Attended the CASF Infrastructure Workshop.
- Attended the CETF Regional Broadband Consortia Summit (January 2nd- 4th).

Outcomes in Deployment

- Actively engaged Placer County and two ISPs in a planning effort to serve Kingwoods West (an under-served neighborhood in Charter footprint)
- Charter declined to expand service; however, AT&T is actively pursuing a planning process to serve the neighborhood.
- Developed a funding mechanism based on Charter's cost estimate allowing homeowners to pay a lump sum, have their property taxes assessed, or opt out of the build out.
- (a)Met with Placer County Treasurer and Placer County CEO to discuss allowing Kingwoods Estates homeowners to have their property taxes assessed to pay for broadband projects.
- Coordinated with a consultant and Kingwoods Estates liaison to conduct a neighborhood wide speed test over Labor Day weekend.
- Reengaged with the CPUC to reclassify the neighborhood Kingwoods Estates as an underserved community.
- Assisted and advised the Tahoe Transportation District on their FirstNet project, which will encompass the entire Tahoe Basin and bolster public safety measures.
- Met with 2 ISP to discuss the viability of a Basin-wide public Wi-Fi network.
- Met with local resort owner to explore possibility of TPC convening relevant stakeholders to have utility and broadband undergrounded in the Tahoe Vista CA-28 corridor.
- Updated our internal maps to reflect the latest updates, as per our licensing agreement with a third-party Broadband data provider.

Attachment C-1: Approved Public Housing Infrastructure Grants

Projects Approved								
Built Projects								
	RECIPIENT	PROJECT	CITY	UNITS	GRANT AWARD	PAYMENTS 2018	TOTAL PAID	COMPLETE DATE OR EXPECTED
1	Abode Communities	Laurel Village	Los Angeles	80	\$36,000		\$29,370	3/7/2016
2	Affordable Housing Access	Villa Mirage	Rancho Mirage	98	\$44,100		\$44,100	10/27/2017
3	Affordable Housing Alliance II, Inc. dba Integrity Housing	Dudley Street Senior Apartments	Pomona	84	\$37,350		\$37,351	3/15/2017
4	Affordable Housing Alliance II, Inc. dba Integrity Housing	Guest House	Santa Ana	72	\$32,400	\$32,400	\$32,400	7/31/2018
5	Affordable Housing Alliance II, Inc. dba Integrity Housing	Rocky Hill Veterans	Vacaville	39	\$23,400			+
6	Better Opportunity Builders (BOB)	Brierwood	Fresno	50	\$47,730			+
7	Better Opportunity Builders (BOB)	Villa Del Mar	Fresno	48	\$28,060			+
8	Burbank Housing Development Corp.	Crossroads Apartments	Santa Rosa	79	\$35,288	\$35,288	\$35,288	8/14/2018
9	Burbank Housing Development Corp.	Parklane Apartments	Petaluma	90	\$39,875		\$38,710	9/16/2016
10	Butterfield Retirement LP	Butterfield Retirement	Morgan Hill	114	\$34,020		\$34,020	9/20/2017
11	Cabrillo Economic Development Corporation	Montgomery Oaks	Ojai	21	\$12,600		\$12,600	7/27/2016
12	Cabrillo Economic Development Corporation	Valle Naranjal Farmwork Housing	Piru	68	\$30,600		\$22,963	10/3/2016
13	Chinatown Community Development Center	227 Bay	San Francisco	50	\$22,313		\$22,063	5/31/2017
14	Chinatown Community Development Center	990 Pacific	San Francisco	92	\$40,120	\$39,285	\$39,285	11/20/2017
15	Community Housing Works	Cedar Nettleton	Vista	67	\$30,150	\$30,076	\$30,076	1/15/2018
16	Community Housing Works	Cypress Cove	Escondido	200	\$85,000		\$85,000	6/27/2017
17	Community Housing Works	Mayberry Townhomes	San Diego	70	\$40,250		\$40,250	6/27/2017
18	Community Housing Works	Mission Cove	Oceanside	138	\$41,400	\$41,400	\$41,400	7/10/2018
19	Community Housing Works	North Park LGBT Senior	San Diego	76	\$34,200	\$34,200	\$34,200	2/28/2018
20	Community Housing Works	Northwest Manors II (Mountain)	Pasadena	26	\$15,600		\$15,600	2/9/2017
21	Community Housing Works	Northwest Manors II (Raymond)	Pasadena	18	\$10,800		\$10,800	1/18/2017
22	Community Housing Works	Parks at Fig Garden	Fresno	366	\$75,000	\$74,952	\$74,952	11/2/2018
23	Community Housing Works	Sunridge Apartments	Concord	198	\$59,400	\$59,400	\$59,400	11/9/2018
24	CONCERNED CITIZENS OF SOUTH CENTRAL LOS ANGELES	1410 Apartments	Los Angeles	12	\$7,192	\$7,192	\$7,192	11/6/2018
25	CONCERNED CITIZENS OF SOUTH CENTRAL LOS ANGELES	Central Avenue Village Apartments	Los Angeles	45	\$24,438		\$23,686	11/1/2015
26	CONCERNED CITIZENS OF SOUTH CENTRAL LOS ANGELES	Gwen Bolden Manor	Los Angeles	24	\$14,399		\$13,847	10/1/2015
27	CONCERNED CITIZENS OF SOUTH CENTRAL LOS ANGELES	Juanita Tate Legacy Towers	Los Angeles	118	\$34,882	\$33,694	\$33,694	6/30/2017

* Projects scheduled to be recaptured in 2019

	RECIPIENT	PROJECT	CITY	UNITS	GRANT AWARD	PAYMENTS 2018	TOTAL PAID	COMPLETE DATE OR EXPECTED
28	CONCERNED CITIZENS OF SOUTH CENTRAL LOS ANGELES	ONE WILKINS PLACE	Los Angeles	18	\$10,605	\$10,605	\$10,605	11/9/2018
29	CONCERNED CITIZENS OF SOUTH CENTRAL LOS ANGELES	Roberta II	Los Angeles	40	\$22,255	\$7,650	\$7,650	11/12/2018
30	CONCERNED CITIZENS OF SOUTH CENTRAL LOS ANGELES	Roberta Stephens Apartments I	Los Angeles	40	\$22,255	\$10,350	\$10,350	11/9/2018
31	Deep Green Housing and Community Development	Broadway Village II	Los Angeles	50	\$19,900		\$18,650	2/3/2016
32	EAH Housing Corporation	Buchanan Park	San Francisco	68	\$30,125	\$30,125	\$30,125	3/6/2018
33	EAH Housing Corporation	Casa Adobe	San Pablo	54	\$21,288		\$21,287	3/22/2017
34	EAH Housing Corporation	Centertown	San Rafael	60	\$26,638	\$26,638	\$26,638	12/7/2017
35	EAH Housing Corporation	Cochrane Village	Morgan Hill	96	\$40,620			6/30/2019
36	EAH Housing Corporation	Don De Dios	San Jose	70	\$31,263	\$31,013	\$31,013	6/28/2018
37	EAH Housing Corporation	Drakes Way	Larkspur	24	\$13,833			6/30/2019
38	EAH Housing Corporation	Elena Gardens	San Jose	168	\$66,860		\$66,860	5/11/2017
39	EAH Housing Corporation	Floral Gardens	Selma	56	\$23,140		\$23,140	4/12/2017
40	EAH Housing Corporation	Fountain West	Fresno	72	\$30,793		\$30,793	8/31/2017
41	EAH Housing Corporation	Golden Oaks	Oakley	50	\$29,225	\$28,975	\$28,975	11/14/2017
42	EAH Housing Corporation	Los Robles	Union City	140	\$42,000			1/31/2019
43	EAH Housing Corporation	Palm Court	San Jose	66	\$26,128		\$26,098	9/16/2016
44	EAH Housing Corporation	Point Reyes Family Homes	Point Reyes Station	27	\$16,200	\$16,075	\$16,075	3/22/2018
45	EAH Housing Corporation	Pollard Plaza	San Jose	130	\$49,650		\$49,650	8/24/2017
46	EAH Housing Corporation	Riviera	San Rafael	28	\$13,033		\$12,333	3/8/2016
47	EAH Housing Corporation	Rodeo Gateway	Rodeo	50	\$17,175		\$15,313	3/10/2016
48	EAH Housing Corporation	San Clemente	Corte Madera	79	\$31,923		\$29,736	4/21/2016
49	EAH Housing Corporation	Silver Oak	Oakley	24	\$12,573		\$12,573	9/21/2016
50	EAH Housing Corporation	The Oaks Apartments	Walnut Creek	36	\$15,428		\$15,428	6/22/2017
51	EAH Housing Corporation	Turina House	San Rafael	28	\$12,533		\$11,833	3/9/2016
52	EAH Housing Corporation	Village Avante	Morgan Hill	112	\$33,600			6/30/2019
53	EAH Housing Corporation	Vista Park I	San Jose	83	\$30,608		\$30,493	8/25/2016
54	EAH Housing Corporation	Vista Park II	San Jose	83	\$30,608		\$30,493	9/13/2016
55	East Bay Asian Local Development Corporation	Avalon Senior	Emeryville	67	\$27,925		\$27,925	3/21/2017
56	East Bay Asian Local Development Corporation	Drasin Manor	Oakland	26	\$13,633		\$13,633	1/26/2017
57	East Bay Asian Local Development Corporation	Effie's House	Oakland	21	\$12,175		\$12,175	2/2/2017
58	East Bay Asian Local Development Corporation	Giant Road	San Pablo	86	\$38,115		\$30,735	6/23/2017
59	East Bay Asian Local Development Corporation	Hugh Taylor House	Oakland	43	\$20,848		\$20,848	2/9/2017
60	East Bay Asian Local Development Corporation	Jack London Gateway Senior	Oakland	61	\$19,865		\$19,865	12/19/2016
61	East Bay Asian Local Development Corporation	Lillie Mae Jones	Richmond	26	\$11,580		\$11,580	6/1/2017
62	East Bay Asian Local Development Corporation	Madison Park	Oakland	98	\$42,605		\$42,605	8/2/2017
63	East Bay Asian Local Development Corporation	Madrone Hotel	Oakland	32	\$18,088	\$12,690	\$18,088	2/14/2018
64	East Bay Asian Local Development Corporation	Marcus Carvey	Oakland	22	\$13,050		\$13,050	8/2/2017
65	East Bay Asian Local Development Corporation	Oak Park	Oakland	35	\$16,975		\$16,975	1/25/2017

	RECIPIENT	PROJECT	CITY	UNITS	GRANT AWARD	PAYMENTS 2018	TOTAL PAID	COMPLETE DATE OR EXPECTED
66	East Bay Asian Local Development Corporation	Prosperity Place (aka 1110 Jackson)	Oakland	71	\$31,501		\$26,094	11/17/2016
67	East Bay Asian Local Development Corporation	San Pablo Hotel	Oakland	144	\$42,980		\$42,980	3/23/2017
68	East Bay Asian Local Development Corporation	Seven Directions	Oakland	36	\$13,753		\$10,853	4/11/2016
69	East Bay Asian Local Development Corporation	Slim Jenkins Court	Oakland	32	\$15,300		\$15,300	6/13/2017
70	East Bay Asian Local Development Corporation	Swans Market	Oakland	18	\$10,175		\$10,175	6/1/2017
71	Eden Housing, Inc.	The Altheim	Oakland	174	\$52,123			"
72	Eden Housing, Inc.	Eden Essei Terrace	Hayward	100	\$36,575	\$36,575	\$36,575	9/21/2017
73	Eden Housing, Inc.	Hayward Senior	Hayward	60	\$24,375	\$24,375	\$24,375	4/4/2018
74	Eden Housing, Inc.	Jasmine Square	Morgan Hill	72	\$28,029			1/10/2019
75	Eden Housing, Inc.	Josephine Lum Lodge AB	Hayward	78	\$31,983			12/28/2018
76	Eden Housing, Inc.	Josephine Lum Lodge CD	Hayward	72	\$29,505			12/28/2018
77	Eden Housing, Inc.	Monticelli	Citroy	52	\$23,195			"
78	Eden Housing, Inc.	Rancho Park	Hollister	54	\$24,195			"
79	Eden Housing, Inc.	Royal Court	Morgan Hill	55	\$19,028			"
80	Eden Housing, Inc.	Sequoia Manor	Fremont	81	\$33,975	\$33,975	\$33,975	1/18/2018
81	Eden Housing, Inc.	Tienda Drive Senior	Lodi	80	\$34,750		\$34,625	9/14/2017
82	Eden Housing, Inc.	Water Creek	Novato	61	\$25,358	\$25,358	\$25,358	1/24/2018
83	Eden Housing, Inc.	Wheeler Manor 650 5th	Citroy	21	\$10,151			11/27/2018
84	Eden Housing, Inc.	Wheeler Manor 651 6th	Citroy	90	\$35,708			11/27/2018
85	Eden South Bay, Inc.	Camphora Apartments	Soledad	44	\$26,198		\$26,198	6/17/2016
86	Episcopal Community Services of San Francisco	Bishop Swing Community House	San Francisco	135	\$38,685		\$38,685	1/24/2017
87	Episcopal Community Services of San Francisco	Canon Barcus Community House	San Francisco	48	\$21,408		\$21,408	1/10/2017
88	Episcopal Community Services of San Francisco	Canon Kip Community House	San Francisco	104	\$30,848		\$30,848	12/21/2016
89	First Community Housing	Bay Avenue Senior	Capitola	109	\$32,655		\$26,148	1/28/2016
90	First Community Housing	Betty Ann Gardens	San Jose	76	\$29,428		\$29,048	6/21/2016
91	First Community Housing	Casa Feliz Studios	San Jose	60	\$22,700		\$16,200	1/6/2016
92	First Community Housing	Craig Gardens	San Jose	90	\$26,100		\$25,425	12/3/2015
93	First Community Housing	Creekview Inn	San Jose	25	\$8,150		\$8,025	1/26/2016
94	First Community Housing	Curtner Studios	San Jose	179	\$53,533		\$53,533	4/19/2017
95	First Community Housing	El Paseo	San Jose	98	\$33,433		\$32,733	2/17/2016
96	First Community Housing	Guadalupe Apartments	San Jose	23	\$13,583		\$12,468	5/7/2016
97	First Community Housing	Los Esteros	San Jose	246	\$66,690		\$63,340	1/26/2016
98	First Community Housing	Murphy Ranch	Morgan Hill	100	\$34,838		\$33,037	9/28/2015
99	First Community Housing	Orchard Gardens	Sunnyvale	62	\$21,680		\$17,330	6/8/2016
100	First Community Housing	Paula Apartments	San Jose	21	\$10,152		\$10,047	4/7/2016
101	First Community Housing	Second Street Studios	San Jose	135	\$40,350			6/30/2019
102	First Community Housing	Troy Apartments	San Jose	30	\$16,475		\$15,425	5/12/2016
103	First Community Housing	Villa Montgomery	Redwood City	58	\$18,845		\$18,395	3/11/2016
104	Global CVCAH	Bay Family	Moreno Valley	61	\$26,840		\$26,840	11/22/2016
105	Global CVCAH	Clinton Apartments	Mecca	59	\$25,960		\$25,960	3/1/2017
106	Global CVCAH	La Amistad	Mendota	81	\$35,640		\$35,640	11/10/2016
107	Global CVCAH	Lincoln Family	Mecca	57	\$25,080		\$25,080	3/1/2017
108	Global CVCAH	Meridian Family	Sacramento	47	\$25,850		\$25,850	7/7/2017
109	Global CVCAH	Mirage Vista	Pidley	55	\$24,200		\$24,200	11/23/2016
110	Global CVCAH	Perris Isle Senior	Moreno Valley	189	\$85,050		\$85,050	7/18/2017
111	Global CVCAH	Sunnyview I	Delano	70	\$29,750		\$29,750	11/21/2016
112	Global CVCAH	Sunnyview II	Delano	70	\$29,750		\$29,750	11/21/2016
113	HIP Housing	Edgewater Isle	San Mateo	92	\$29,343		\$21,893	3/30/2016

* Projects scheduled to be rescheduled in 2019

	RECIPIENT	PROJECT	CITY	UNITS	GRANT AWARD	PAYMENTS 2018	TOTAL PAID	COMPLETE DATE OR EXPECTED
114	Housing Authority of Fresno County	Maldonado Migrant Center	Firebaugh	64	\$28,800			-
115	Housing Authority of the City of Fresno, CA	Dayton Square	Fresno	66	\$29,370		\$7,343	2/28/2019
116	Housing Authority of the City of Fresno, CA	El Cortez	Fresno	48	\$27,840	\$20,880	\$27,840	9/25/2018
117	Housing Authority of the City of Los Angeles	Independent Towers (Independent Square)	Los Angeles	196	\$58,698		\$58,690	5/26/2016
118	Housing Authority of the City of Los Angeles	San Fernando Gardens (Note for number of Residents below: SF Gardens has 1,692; field doesn't accept >1,000.)	Pacoima	448	\$200,978		\$200,977	6/8/2017
119	Housing Authority of the City of Los Angeles	Union Towers	Los Angeles	200	\$60,000		\$59,970	5/26/2016
120	Housing Authority of the City of San Buenaventura	Buena Vida Family	Ventura	20	\$11,925	\$11,925	\$11,925	8/15/2018
121	Housing Authority of the City of San Buenaventura	Westview	Ventura	100	\$44,963			6/30/2019
122	Housing Authority of the County of Kern	Arvin FLC	Bakersfield	88	\$74,800			12/31/2018
123	Housing Authority of the County of Kern	Arvin Sun Gardens	Arvin	50	\$30,000			12/31/2018
124	Housing Authority of the County of Kern	Baker Street	Bakersfield	37	\$22,200	\$5,500	\$22,150	8/31/2017
125	Housing Authority of the County of Kern	Green Gardens	Bakersfield	104	\$31,200	\$31,200	\$31,200	10/5/2017
126	Housing Authority of the County of Kern	Homer Harrison	Delano	50	\$30,000	\$7,500	\$30,000	8/31/2017
127	Housing Authority of the County of Kern	Monterey St	Bakersfield	16	\$15,808			12/31/2018
128	Housing Authority of the County of Kern	Park Place Apartments	Bakersfield	80	\$36,000	\$9,000	\$36,000	8/31/2017
129	Housing Authority of the County of Kern	Parkview	Arvin	28	\$27,300			12/31/2018
130	Housing Authority of the County of Kern	Pinewood Glen	Bakersfield	110	\$33,000	\$8,250	\$33,000	8/31/2017
131	Housing Authority of the County of Kern	Plaza Towers	Bakersfield	117	\$35,100	\$8,775	\$35,100	8/31/2017
132	Housing Authority of the County of Kern	Plaza Towers Annex	Bakersfield	82	\$36,900	\$9,225	\$36,900	8/31/2017
133	Housing Authority of the County of Kern	Quincy St. Apartments	Delano	32	\$19,200	\$4,800	\$19,200	8/31/2017
134	Housing Authority of the County of Kern	Residence at Old Town Kern	Bakersfield	30	\$18,000	\$4,500	\$18,000	8/31/2017
135	Housing Authority of the County of Kern	Residence at West Columbus	Bakersfield	50	\$30,000	\$7,500	\$30,000	8/31/2017
136	Housing Authority of the County of Kern	Village Congressional	Arvin	60	\$51,000			12/31/2018
137	Housing Authority of the County of Kern	Village Park Apartments	Bakersfield	60	\$27,000	\$6,750	\$27,000	8/31/2017
138	Housing Authority of the County of Santa Barbara	Lompoc Gardens I	Lompoc	40	\$33,800	\$8,450	\$33,800	1/31/2018
139	Housing Authority of the County of Santa Barbara	Lompoc Gardens II	Lompoc	35	\$33,075	\$8,269	\$33,075	1/31/2018
140	Housing Authority of the County of Santa Barbara	Miller Plaza	Lompoc	24	\$22,128	\$5,532	\$22,128	1/31/2018
141	Housing Authority of the County of Santa Barbara	Parkside Garden Apartments	Lompoc	48	\$28,800	\$7,200	\$28,800	1/31/2018
142	LONG BEACH AFFORDABLE HOUSING COALITION	Acacia Street Apartments	Inglewood	23	\$12,487			11/30/2019

* Projects scheduled to be rescinded in 2019

	RECIPIENT	PROJECT	CITY	UNITS	GRANT AWARD	PAYMENTS 2018	TOTAL PAID	COMPLETE DATE OR EXPECTED
143	LONG BEACH AFFORDABLE HOUSING COALITION	BEVERLY MANOR	LOS ANGELES	59	\$26,550		\$15,932	11/30/2019
144	LONG BEACH AFFORDABLE HOUSING COALITION	CARLIN AVENUE APARTMENTS	Lynwood	15	\$8,250			11/30/2019
145	LONG BEACH AFFORDABLE HOUSING COALITION	GRACE MANOR	CARSON	38	\$21,517		\$12,286	11/30/2019
146	LONG BEACH AFFORDABLE HOUSING COALITION	LOUISE AVENUE APARTMENTS	LYNWOOD	14	\$7,970			11/30/2019
147	LONG BEACH AFFORDABLE HOUSING COALITION	METRO WEST APARTMENTS	Los Angeles	40	\$18,176		\$8,576	11/30/2019
148	LONG BEACH AFFORDABLE HOUSING COALITION	ORIZABA AVENUE	Paramount	8	\$4,730			11/30/2019
149	LONG BEACH AFFORDABLE HOUSING COALITION	RAYMOND AVENUE APARTMENTS	LONG BEACH	8	\$4,730			11/30/2019
150	LONG BEACH AFFORDABLE HOUSING COALITION	SOMERSET AVENUE APARTMENTS	PARAMOUNT	24	\$12,440			11/30/2019
151	Mary Elizabeth Inn	Mary Elizabeth Inn	San Francisco	92	\$40,271		\$40,121	10/19/2017
152	Mary Elizabeth Inn	The Verona	San Francisco	65	\$28,278		\$28,273	4/5/2017
153	Mercy Housing California	180 Beamer	Woodland	80	\$35,675			12/17/2018
154	Mercy Housing California	623 Vernon	Roseville	58	\$25,660	\$25,660	\$25,660	10/25/2018
155	Mercy Housing California	Land Park Woods	Sacramento	75	\$33,675		\$33,550	6/22/2017
156	Mercy Housing California	Mather Veterans Village	Mather	50	\$21,663		\$16,415	5/23/2016
157	Mercy Housing California	Sunset Valley Duplexes	Wheatland	88	\$31,520		\$29,320	1/14/2016
158	MidPen Housing Corporation	Celestina Gardens	Sonoma	40	\$22,589			10/1/2019
159	MidPen Housing Corporation	Donner Lofts	San Jose	102	\$30,443		\$30,443	5/18/2016
160	MidPen Housing Corporation	Fetters Apartments	Sonoma	60	\$26,770	\$14,500	\$26,770	2/7/2017
161	MidPen Housing Corporation	Foster Square	Foster City	66	\$28,833		\$28,833	8/22/2016
162	MidPen Housing Corporation	Laguna Commons	Fremont	64	\$28,752		\$28,432	8/30/2016
163	MidPen Housing Corporation	St. Stephens Senior Housing	Santa Cruz	40	\$23,509		\$23,509	5/22/2017
164	Mid-Peninsula The Farm, Inc.	6800 Mission	Daly City	52	\$23,400		\$23,400	3/23/2017
165	Mid-Peninsula The Farm, Inc.	Onizuka Crossing	Sunnyvale	58	\$23,572		\$23,572	4/26/2016
166	Mid-Peninsula The Farm, Inc.	Sequoia Belle Haven	Menlo Park	90	\$39,794	\$39,794	\$39,794	2/20/2017
167	Mid-Peninsula The Farm, Inc.	University Avenue Senior	East Palo Alto	41	\$24,193		\$24,193	7/14/2017
168	Mutual Housing California	Lemon Hill Townhomes	Sacramento	74	\$31,885		\$30,035	12/10/2015
169	Mutual Housing California	Los Robles	Sacramento	80	\$35,288		\$34,293	12/8/2015
170	Mutual Housing California	Mutual Housing at Foothill Farms	Sacramento	98	\$43,575		\$43,085	1/19/2017
171	Napa Valley Community Housing	Arroyo Grande Villas	Yountville	25	\$20,625	\$5,156	\$20,625	2/22/2018
172	Napa Valley Community Housing	Magnolia Park Townhomes	Napa	29	\$23,925	\$5,981	\$23,925	2/22/2018
173	Napa Valley Community Housing	Mayacamas Village	Napa	51	\$41,565	\$10,391	\$41,565	2/23/2018

	RECIPIENT	PROJECT	CITY	UNITS	GRANT AWARD	PAYMENTS 2018	TOTAL PAID	COMPLETE DATE OR EXPECTED
174	Napa Valley Community Housing	Napa Park Homes	Napa	140	\$63,700	\$15,925	\$63,700	2/27/2018
175	Napa Valley Community Housing	Oak Creek Terrace	Napa	41	\$30,955	\$7,739	\$30,955	2/22/2018
176	Napa Valley Community Housing	Pecan Court Apartments	Napa	25	\$23,875	\$5,969	\$23,875	3/5/2018
177	Napa Valley Community Housing	Silverado Creek Apartments	Napa	102	\$66,810	\$16,703	\$66,810	2/20/2018
178	Napa Valley Community Housing	The Reserve of Napa	Napa	117	\$64,350	\$16,088	\$64,350	2/21/2018
179	Napa Valley Community Housing	Villa de Adobe Apartments	Napa	16	\$15,600	\$3,900	\$15,600	2/21/2018
180	Peoples' Self-Help Housing	Atascadero Gardens	Atascadero	18	\$10,800	\$2,700	\$2,700	6/30/2019
181	Peoples' Self-Help Housing	Belridge Street Apartments	Oceano	12	\$7,200			6/30/2019
182	Peoples' Self-Help Housing	Canyon Creek Apartments	Paso Robles	68	\$30,600		\$30,600	8/30/2017
183	Peoples' Self-Help Housing	Casas Las Granadas	Santa Barbara	12	\$7,200			6/30/2019
184	Peoples' Self-Help Housing	Cawelti Court	Arroyo Grande	28	\$16,800		\$16,800	8/30/2017
185	Peoples' Self-Help Housing	Chapel Court	Carpinteria	28	\$16,800			6/30/2019
186	Peoples' Self-Help Housing	College Park	Lompoc	35	\$21,000		\$21,000	8/30/2017
187	Peoples' Self-Help Housing	Courtland Street Apartments	Arroyo Grande	36	\$21,600		\$21,600	8/30/2017
188	Peoples' Self-Help Housing	Creekside Gardens	Paso Robles	29	\$17,400		\$17,400	8/30/2017
189	Peoples' Self-Help Housing	Creston Gardens	Paso Robles	60	\$27,000	\$27,000	\$27,000	7/11/2018
190	Peoples' Self-Help Housing	Dahlia Court	Carpinteria	55	\$52,250	\$13,063	\$13,063	12/19/2018
191	Peoples' Self-Help Housing	Dahlia Court II	Carpinteria	33	\$31,350	\$31,350	\$31,350	11/5/2018
192	Peoples' Self-Help Housing	El Patio Hotel	Ventura	42	\$25,200		\$25,200	8/30/2017
193	Peoples' Self-Help Housing	Isle Vista Apartments	Isla Vista	56	\$30,800	\$30,800	\$30,800	11/5/2018
194	Peoples' Self-Help Housing	Juniper Street Apartments	Arroyo Grande	14	\$8,400			6/30/2019
195	Peoples' Self-Help Housing	La Brisa Marina	Oceano	16	\$9,600	\$2,400	\$2,400	6/30/2019
196	Peoples' Self-Help Housing	Lachen Tara	Avila Beach	29	\$17,400		\$17,400	8/30/2017
197	Peoples' Self-Help Housing	Ladera Street Apartments	Santa Barbara	51	\$28,050	\$28,050	\$28,050	11/5/2018
198	Peoples' Self-Help Housing	Los Adobes de Maria I	Santa Maria	65	\$29,250		\$29,250	8/30/2017
199	Peoples' Self-Help Housing	Los Adobes de Maria II	Santa Maria	52	\$23,400		\$23,400	8/30/2017
200	Peoples' Self-Help Housing	Los Robles Terrace	Paso Robles	40	\$24,000		\$24,000	8/30/2017
201	Peoples' Self-Help Housing	Mariposa Town Homes	Orcutt	80	\$76,000		\$76,000	10/26/2017
202	Peoples' Self-Help Housing	Oak Forest Apartments	Arroyo Grande	20	\$12,000	\$3,000	\$3,000	6/30/2019
203	Peoples' Self-Help Housing	Ocean View Manor	Morro Bay	40	\$24,000		\$24,000	8/30/2017

	RECIPIENT	PROJECT	CITY	UNITS	GRANT AWARD	PAYMENTS 2018	TOTAL PAID	COMPLETE DATE OR EXPECTED
204	Peoples' Self-Help Housing	Oceanside Gardens	Morro Bay	21	\$12,600		\$12,600	8/30/2017
205	Peoples' Self-Help Housing	Pacific View Apartments	Morro Bay	26	\$15,600		\$15,600	8/30/2017
206	Peoples' Self-Help Housing	River View Townhomes	Guadalupe	80	\$36,000		\$36,000	8/30/2017
207	Peoples' Self-Help Housing	Rolling Hills Apartments	Templeton	53	\$49,025			*
208	Peoples' Self-Help Housing	Schoolhouse Lane Apartments	Cambria	24	\$14,400		\$14,400	8/30/2017
209	Peoples' Self-Help Housing	Sea Breeze Apartments	Los Osos	29	\$17,400			6/30/2019
210	Peoples' Self-Help Housing	Sea Haven Apartments	Pismo Beach	12	\$7,200			6/30/2019
211	Peoples' Self-Help Housing	Sequoia Apartments	Morro Bay	12	\$7,200	\$1,800	\$1,800	6/30/2019
212	Peoples' Self-Help Housing	South Bay Apartments	Los Osos	75	\$33,750			6/30/2019
213	Peoples' Self-Help Housing	Storke Ranch Apartments	Goleta	36	\$27,180	\$20,385	\$20,385	6/30/2019
214	Peoples' Self-Help Housing	Templeton Place	Templeton	29	\$17,400		\$17,400	8/30/2017
215	Peoples' Self-Help Housing	The Villas at Higuera	San Luis Obispo	28	\$16,800		\$16,800	8/30/2017
216	Peoples' Self-Help Housing	Valentine Court I	Santa Maria	35	\$21,000	\$5,250	\$5,250	6/30/2019
217	Peoples' Self-Help Housing	Valentine Court II	Santa Maria	18	\$10,800			6/30/2019
218	Peoples' Self-Help Housing	Valentine Court III	Santa Maria	9	\$5,400			6/30/2019
219	Peoples' Self-Help Housing	Victoria Hotel	Santa Barbara	28	\$16,800		\$16,800	8/30/2017
220	Peoples' Self-Help Housing	Victoria Street Bungalows	Santa Barbara	16	\$15,200	\$15,200	\$15,200	6/7/2018
221	Peoples' Self-Help Housing	Villa La Esperanza	Goleta	83	\$53,950	\$40,463	\$40,463	12/19/2018
222	Petaluma Ecumenical Properties	10 Toussin	Kentfield	13	\$7,557		\$6,492	6/24/2015
223	Petaluma Ecumenical Properties	1275 Lindberg	Petaluma	16	\$8,296		\$7,161	6/25/2015
224	Petaluma Ecumenical Properties	167 Edith	Petaluma	24	\$10,675		\$9,300	6/23/2015
225	Petaluma Ecumenical Properties	210 Douglas	Petaluma	24	\$10,287		\$9,197	6/23/2015
226	Petaluma Ecumenical Properties	575 Vallejo	Petaluma	45	\$16,822		\$14,566	6/22/2015
227	Petaluma Ecumenical Properties	579 Vallejo	Petaluma	40	\$12,295		\$11,419	6/23/2015
228	Petaluma Ecumenical Properties	Casa Grande	Petaluma	58	\$24,029		\$20,619	1/28/2016
229	Petaluma Ecumenical Properties	Caulfield Lane	Petaluma	22	\$12,501		\$9,661	1/28/2016
230	Petaluma Ecumenical Properties	Mountain View	Petaluma	24	\$10,087		\$9,617	2/2/2016
231	Petaluma Ecumenical Properties	Sun House Senior	Ukiah	42	\$20,803		\$20,803	9/15/2017
232	Richmond Housing Authority	Friendship Manor	Richmond	58	\$25,152			2/28/2019
233	Richmond Housing Authority	Nevin Plaza	Richmond	142	\$41,520			2/28/2019
234	Richmond Housing Authority	Triangle Court	Richmond	98	\$43,080			2/28/2019

* Projects scheduled to be rescinded in 2019

	RECIPIENT	PROJECT	CITY	UNITS	GRANT AWARD	PAYMENTS 2018	TOTAL PAID	COMPLETE DATE OR EXPECTED
235	San Francisco Housing Development Corporation	Bayview Commons	San Francisco	29	\$17,166	\$17,166	\$17,166	11/16/2017
236	San Francisco Housing Development Corporation	Hunters Point East	San Francisco	89	\$39,601	\$39,601	\$39,601	6/4/2018
237	San Francisco Housing Development Corporation	Hunters Point West	San Francisco	124	\$36,967	\$36,967	\$36,967	3/23/2018
238	San Francisco Housing Development Corporation	Westbrook Apartments	San Francisco	227	\$67,157			6/30/2019
239	Santa Barbara Housing Assistance Corporation	Aurora Village	Lancaster	132	\$39,600			-
240	Santa Barbara Housing Assistance Corporation	Sierra View Gardens	Palmdale	144	\$43,200			-
241	Satellite Affordable Housing Associates	Amistad House	Oakland	60	\$22,235		\$20,293	10/14/2016
242	Satellite Affordable Housing Associates	Beth Asher	Oakland	50	\$30,125		\$17,920	6/9/2017
243	Satellite Affordable Housing Associates	Columbia Park Manor	Pittsburg	79	\$21,225		\$21,225	3/30/2017
244	Satellite Affordable Housing Associates	Lakeside Senior Apartments	Oakland	100	\$23,733		\$23,734	3/2/2017
245	Satellite Affordable Housing Associates	Lawrence Moore	Berkeley	46	\$16,537		\$16,537	5/28/2017
246	Satellite Affordable Housing Associates	Linda Glen	Oakland	42	\$15,520		\$15,457	3/4/2017
247	Satellite Affordable Housing Associates	Otterbein Manor	Oakland	44	\$15,949		\$15,847	4/26/2017
248	Satellite Affordable Housing Associates	Petaluma Avenue Homes	Sebastopol	45	\$17,994		\$17,994	12/2/2016
249	Satellite Affordable Housing Associates	Sacramento Senior Homes	Berkeley	40	\$16,844		\$16,844	4/30/2017
250	Satellite Affordable Housing Associates	Satellite Central	Oakland	152	\$33,461		\$33,339	10/14/2016
251	Satellite Affordable Housing Associates	Stuart Pratt	Berkeley	44	\$26,638		\$16,582	5/30/2017
252	Satellite Affordable Housing Associates	Valdez Plaza	Oakland	150	\$29,400		\$26,394	8/31/2016
253	Self-Help Enterprises	ALMOND COURT PARTNERS	Wasco	36	\$21,600		\$21,600	4/19/2016
254	Self-Help Enterprises	CALIENTE CREEK PARTNERS	ARVIN	46	\$27,600		\$26,600	4/20/2016
255	Self-Help Enterprises	Cottonwood Creek	Madera	40	\$22,800		\$22,800	4/20/2016
256	Self-Help Enterprises	Gateway Village	Modesto	48	\$28,800	\$28,800	\$28,800	5/2/2018
257	Self-Help Enterprises	Goshen Village II	Goshen	56	\$25,200	\$25,200	\$25,200	5/2/2018
258	Self-Help Enterprises	Lincoln Plaza	Hanford	48	\$24,000		\$24,000	4/26/2016
259	Self-Help Enterprises	NORTH PARK APARTMENTS HOUSING CORPORATION	BAKERSFIELD	104	\$31,200		\$31,200	5/5/2016
260	Self-Help Enterprises	Parksdale Village II	Madera	48	\$28,800	\$28,800	\$28,800	5/2/2018
261	Self-Help Enterprises	RANCHO LINDO PARTNERS	LAMONT	44	\$35,200	\$8,800	\$35,200	4/13/2017
262	Self-Help Enterprises	ROLLING HILLS PARTNERS	NEWMAN	52	\$28,600	\$7,150	\$28,600	4/13/2017
263	Self-Help Enterprises	Sand Creek	Crosi	60	\$27,000	\$27,000	\$27,000	5/2/2018
264	Self-Help Enterprises	SOLINAS VILLAGE aka SELF HELP COMMUNITIES 1, LLC	MCFARLAND	52	\$35,100	\$8,775	\$35,100	4/13/2017
265	Self-Help Enterprises	SUNRISE VILLA PARTNERS	WASCO	44	\$26,400		\$26,400	4/19/2016
266	Self-Help Enterprises	Villa de Guadalupe	Crosi	60	\$27,000	\$27,000	\$27,000	5/2/2018
267	Self-Help Enterprises	Villa Del Rey	Del Rey	48	\$28,800		\$28,800	4/22/2016

* Projects scheduled to be rescinded in 2019

	RECIPIENT	PROJECT	CITY	UNITS	GRANT AWARD	PAYMENTS 2018	TOTAL PAID	COMPLETE DATE OR EXPECTED
268	Self-Help Enterprises	VILLA HERMOSA PARTNERS	WASCO	40	\$24,000		\$24,000	4/22/2016
269	Self-Help Enterprises	Viscaya Gardens	Dimuba	48	\$28,800	\$28,800	\$28,800	5/2/2018
270	Self-Help Enterprises	WASHINGTON PLAZA PARTNERS	EARLHART	44	\$26,400		\$26,400	4/21/2016
271	Silvercrest, Inc.	Inyo Terrace	Fresno	44	\$25,960	\$19,470	\$25,960	11/26/2018
272	Silvercrest, Inc.	Pacific Gardens	Fresno	56	\$28,800			11/26/2018
273	Silvercrest, Inc.	Parc Grove Commons	Fresno	215	\$64,400		\$59,900	4/1/2016
274	Silvercrest, Inc.	Parc Grove Northwest	Fresno	148	\$43,560		\$43,560	4/1/2016
275	Silvercrest, Inc.	Yosemite Village	Fresno	69	\$44,850			2/28/2019
276	Skid Row Housing Trust	Charles Cobb Apartments	Los Angeles	76	\$34,200			11/1/2019
277	Skid Row Housing Trust	New Genesis Apartments	Los Angeles	106	\$31,800			11/1/2019
278	Skid Row Housing Trust	Star Apartments	Los Angeles	102	\$30,600			11/1/2019
279	Surf Development Company	Central Plaza	Santa Maria	112	\$61,040	\$15,260	\$61,040	1/31/2018
280	Surf Development Company	Creskide Village	Los Alamos	39	\$22,386	\$5,597	\$22,386	12/27/2017
281	Surf Development Company	Cypress Court	Lompoc	60	\$27,000	\$6,750	\$27,000	1/31/2018
282	Surf Development Company	Leland Park	Orcutt	16	\$15,600	\$3,900	\$15,600	1/31/2018
283	Surf Development Company	Lompoc Terrace	Lompoc	40	\$24,000			5/30/2019
284	Surf Development Company	Palm Grove	Lompoc	40	\$37,800	\$9,450	\$37,800	1/31/2018
285	Surf Development Company	Parkview Apartments	Goleta	20	\$15,210	\$3,803	\$15,210	1/31/2018
286	Surf Development Company	Pescadero Lofts	Goleta	33	\$19,173	\$4,793	\$19,173	1/31/2018
287	Surf Development Company	Positano Apartments	Goleta	130	\$39,000			5/30/2019
288	Surf Development Company	Rancho Hermosa	Santa Maria	47	\$27,730	\$6,933	\$27,730	12/27/2017
289	Surf Development Company	Sandpiper Apartments	Goleta	68	\$30,600	\$7,650	\$30,600	1/31/2018
290	Surf Development Company	Santa Rita Village I	Lompoc	36	\$21,600	\$5,400	\$21,600	1/31/2018
291	Surf Development Company	Ted Zenich Gardens	Santa Maria	24	\$14,400	\$3,600	\$14,400	1/31/2018
292	Sutter Community Affordable Housing	Kristen Court Apartments	Live Oak	56	\$25,038		\$24,299	12/14/2016
293	Swords to Plowshares Veterans Rights Organization	The Fairfax Hotel	San Francisco	43	\$9,353		\$8,909	10/29/2015
294	Swords to Plowshares Veterans Rights Organization	The Stanford Hotel	San Francisco	130	\$5,144		\$4,462	9/18/2015
295	Tenderloin Neighborhood Development Corporation	430 Turk	San Francisco	89	\$35,215	\$35,215	\$35,215	11/17/2017
296	Tenderloin Neighborhood Development Corporation	939 Eddy	San Francisco	36	\$21,563	\$21,462	\$21,462	12/8/2017
297	Tenderloin Neighborhood Development Corporation	951 Eddy	San Francisco	26	\$15,037	\$15,037	\$15,037	12/11/2017
298	Tenderloin Neighborhood Development Corporation	Aarti Hotel	San Francisco	40	\$23,972	\$23,972	\$23,972	12/8/2017
299	Tenderloin Neighborhood Development Corporation	Alexander Residence	San Francisco	179	\$53,673	\$7,961	\$53,673	12/15/2017
300	Tenderloin Neighborhood Development Corporation	Antonia Manor	San Francisco	133	\$39,726	\$8,484	\$39,726	12/4/2017

	RECIPIENT	PROJECT	CITY	UNITS	GRANT AWARD	PAYMENTS 2018	TOTAL PAID	COMPLETE DATE OR EXPECTED
301	Tenderloin Neighborhood Development Corporation	Buena Vista Terrace	San Francisco	40	\$23,640	\$23,640	\$23,640	12/1/2017
302	Tenderloin Neighborhood Development Corporation	Civic Center Residence	San Francisco	212	\$63,472	\$63,472	\$63,472	2/23/2018
303	Tenderloin Neighborhood Development Corporation	Carran House	San Francisco	67	\$24,966		\$24,865	6/6/2017
304	Tenderloin Neighborhood Development Corporation	Dalt Hotel	San Francisco	179	\$45,574		\$45,547	6/26/2017
305	Tenderloin Neighborhood Development Corporation	Folsom + Dore Apartments	San Francisco	98	\$43,976	\$43,976	\$43,976	9/27/2017
306	Tenderloin Neighborhood Development Corporation	Maria Manor	San Francisco	119	\$34,224	\$11,808	\$32,795	12/15/2017
307	Tenderloin Neighborhood Development Corporation	Mosaica (Family)	San Francisco	93	\$41,170		\$41,170	9/22/2017
308	Tenderloin Neighborhood Development Corporation	Mosaica (Senior)	San Francisco	24	\$14,220		\$14,220	9/22/2017
309	Tenderloin Neighborhood Development Corporation	Ritz Hotel	San Francisco	88	\$30,252		\$30,252	6/1/2017
310	Tenderloin Neighborhood Development Corporation	SOMA Family Apartments	San Francisco	74	\$27,767		\$27,767	6/29/2017
311	Tenderloin Neighborhood Development Corporation	SOMA Studios	San Francisco	88	\$31,344		\$31,344	6/30/2017
312	Tenderloin Neighborhood Development Corporation	West Hotel	San Francisco	106	\$31,683	\$7,232	\$31,683	12/8/2017
313	The Banteker Homes, Inc.	Banteker Homes	San Francisco	108	\$45,900	\$34,425	\$45,900	8/23/2018
314	Visionary Home Builders of California, Inc	Almond Terrace	Ceres	46	\$27,600	\$27,600	\$27,600	11/28/2018
315	Visionary Home Builders of California, Inc	Cedar Gardens	Fresno	145	\$43,500			6/30/2019
316	Visionary Home Builders of California, Inc	Delta Plaza	Stockton	30	\$17,288	\$17,288	\$17,288	4/3/2018
317	Visionary Home Builders of California, Inc	Dewey Apartments	Stockton	10	\$6,000	\$5,750	\$5,750	4/3/2018
318	Visionary Home Builders of California, Inc	Diamond Cove Townhomes I-A	Stockton	36	\$21,600	\$21,600	\$21,600	5/11/2018
319	Visionary Home Builders of California, Inc	Diamond Cove Townhomes I-B	Stockton	24	\$14,400	\$14,360	\$14,360	6/4/2018
320	Visionary Home Builders of California, Inc	Meadow View Terrace	San Andreas	26	\$15,530	\$15,405	\$15,405	4/3/2018
321	Visionary Home Builders of California, Inc	Mountain View Townhomes	Tracy	37	\$22,200	\$21,825	\$21,825	11/28/2018
322	Visionary Home Builders of California, Inc	Villa Isabella	Stockton	20	\$11,925	\$11,675	\$11,675	4/3/2018
323	Visionary Home Builders of California, Inc	Villa Monterey	Stockton	45	\$27,000	\$27,000	\$27,000	11/28/2018
324	Visionary Home Builders of California, Inc	Whispering Pines	Sacramento	96	\$43,200	\$43,200	\$43,200	8/10/2018
325	WARD ECONOMIC DEVELOPMENT CORPORATION	ROSA PARKS VILLAS	Los Angeles	60	\$26,468			12/31/2019
326	WARD ECONOMIC DEVELOPMENT CORPORATION	TUELYN TERRACE	Los Angeles	90	\$40,202			12/31/2019
327	WARD ECONOMIC DEVELOPMENT CORPORATION	WARD VILLAS	Los Angeles	120	\$35,836			12/31/2019
328	West Sacramento Housing Development Corporation	Patio Apartments	West Sacramento	45	\$16,875		\$15,750	1/12/2016
329	West Sacramento Housing Development Corporation	Washington Courtyards	West Sacramento	90	\$23,100		\$20,850	1/13/2016

	RECIPIENT	PROJECT	CITY	UNITS	GRANT AWARD	PAYMENTS 2018	TOTAL PAID	COMPLETE DATE OR EXPECTED
330	West Sacramento Housing Development Corporation	West Capitol	West Sacramento	125	\$32,113		\$32,113	1/12/2016
GRANT TOTAL				22,026	\$9,434,056	\$2,115,859	\$7,399,934	

Attachment C-2: Approved Public Housing Adoption Grants

Projects Approved		Projects Completed						
	RECIPIENT	PROJECT	CITY	RESIDENTS	GRANT AWARD	PAYMENTS 2018	TOTAL PAID	COMPLETION DATE OR EXPECTED
1	Bayview Hunters Point Multipurpose Senior Services, Inc.	Dr. George W. Davis Senior Residence	San Francisco	130	\$41,555			5/27/2020
2	BRIDGE Housing Corporation	Armstrong Place Senior Housing	San Francisco	152	\$36,970	\$34,593	\$34,593	6/30/2019
3	BRIDGE Housing Corporation	Chestnut Creek Senior Housing	South San Francisco	55	\$24,250	\$24,250	\$24,250	12/31/2017
4	BRIDGE Housing Corporation	Chestnut Linden Court	Oakland	410	\$34,170	\$24,000	\$24,000	6/30/2019
5	BRIDGE Housing Corporation	Emeryville	Emeryville	46	\$23,550	\$23,550	\$23,550	12/31/2017
6	BRIDGE Housing Corporation	Geraldine Johnson Senior Housing	San Francisco	74	\$29,130	\$27,382	\$27,382	6/30/2019
7	BRIDGE Housing Corporation	Ironhorse at Central	Oakland	251	\$30,030	\$18,737	\$18,737	6/30/2019
8	BRIDGE Housing Corporation	Mandela Gateway Apartments	Oakland	440	\$34,510	\$34,054	\$34,054	6/30/2019
9	BRIDGE Housing Corporation	Natoma Family Apartments	San Francisco	137	\$25,550	\$21,084	\$21,084	6/30/2019
10	BRIDGE Housing Corporation	Richmond City Center	Richmond	171	\$25,630	\$17,288	\$17,288	6/30/2019
11	BRIDGE Housing Corporation	St. Joseph's Senior Apartments	Oakland	103	\$33,130	\$33,130	\$33,130	12/31/2017
12	BRIDGE Housing Corporation	Terraza Palmera at St. Josephs	Oakland	171	\$26,090	\$17,842	\$17,842	6/30/2019
13	Christian Church Homes (CCH)	Fargo Senior Center	San Leandro	102	\$42,000	\$4,810	\$4,810	2/4/2020
14	Christian Church Homes (CCH)	Harrison Street Senior Housing	Oakland	100	\$25,420	\$3,880	\$3,880	12/28/2019
15	Christian Church Homes (CCH)	Sylvester Rutledge Manor - North Oakland Senior Housing	Oakland	69	\$39,000	\$4,700	\$4,700	2/4/2020
16	Christian Church Homes (CCH)	Westlake Christian Terrace East	Oakland	243	\$49,500	\$3,760	\$3,760	2/4/2020
17	Christian Church Homes (CCH)	Westlake Christian Terrace West	Oakland	250	\$49,500	\$3,840	\$3,840	2/4/2020
18	EAH Housing Corporation	Buchanan Park	San Rafael	154	\$34,460			9/1/2019
19	EAH Housing Corporation	Casa Adobe	San Pablo	56	\$20,390			9/1/2019
20	EAH Housing Corporation	Centertown	San Rafael	180	\$34,930			9/1/2019
21	EAH Housing Corporation	Cochrane Village	Morgan Hill	318	\$49,900			9/30/2020
22	EAH Housing Corporation	Don de Dios	San Rafael	267	\$41,070			9/1/2019
23	EAH Housing Corporation	Drakes Way	Larkspur	68	\$10,500			9/30/2020
24	EAH Housing Corporation	Elena Gardens	San Jose	362	\$49,080			9/1/2019
25	EAH Housing Corporation	Floral Gardens	Selma	143	\$43,286			5/22/2020
26	EAH Housing Corporation	Fountain West	Fresno	196	\$47,133			5/22/2020
27	EAH Housing Corporation	Golden Oaks	Oakley	52	\$19,090			9/1/2019
28	EAH Housing Corporation	Los Robles	Union City	420	\$49,930			3/31/2020
29	EAH Housing Corporation	Palm Court	San Jose	69	\$37,239			5/22/2020
30	EAH Housing Corporation	Point Reyes	Pt. Reyes Station	72	\$16,165			9/1/2019
31	EAH Housing Corporation	Pollard Plaza	San Jose	193	\$49,935			9/1/2019
32	EAH Housing Corporation	Riviera Apartments	San Rafael	77	\$24,960			5/22/2020
33	EAH Housing Corporation	Rodeo Gateway	Rodeo	55	\$21,690			5/22/2020
34	EAH Housing Corporation	San Clemente Place	Corte Madera	212	\$41,478			5/22/2020

	RECIPIENT	PROJECT	CITY	RESIDENTS	GRANT AWARD	PAYMENTS 2018	TOTAL PAID	COMPLETION DATE OR EXPECTED
35	EAH Housing Corporation	Silver Oak	Oakley	26	\$14,680			5/22/2020
36	EAH Housing Corporation	The Oaks	Walnut Creek	104	\$18,513			3/21/2020
37	EAH Housing Corporation	Turina House	San Rafael	91	\$18,150			5/22/2020
38	EAH Housing Corporation	Village Avante	Morgan Hill	100	\$49,990			9/30/2020
39	EAH Housing Corporation	Vista Park 1	San Jose	112	\$37,311			5/22/2020
40	EAH Housing Corporation	Vista Park 2	San Jose	122	\$37,311			5/22/2020
41	East Bay Asian Local Development Corporation (EBALDC)	California Hotel	Oakland	166	\$49,850			4/20/2020
42	East Bay Asian Local Development Corporation (EBALDC)	Hismen Hin-Nu Terrace	Oakland	371	\$49,994			4/20/2020
43	East Bay Asian Local Development Corporation (EBALDC)	Noble Tower Apartments	Oakland	270	\$50,000			4/20/2020
44		801 Alma Family Apartments	Palo Alto	156	\$12,880	\$6,680	\$6,680	1/31/2019
45	Eden Housing, Inc.	Altenheim	Oakland	199	\$19,380	\$18,030	\$18,030	7/1/2018
46	Eden Housing, Inc.	Camphora	Soledad	134	\$21,040	\$11,020	\$11,020	1/31/2019
47	Eden Housing, Inc.	Carlow Court Apartments	Dublin	74	\$12,880	\$6,680	\$6,680	1/31/2019
48	Eden Housing, Inc.	Cottonwood Place Apartments	Fremont	146	\$16,015	\$15,615	\$15,615	7/1/2018
49	Eden Housing, Inc.	Studio 819 Apartments	Mountain View	61	\$12,880	\$12,830	\$12,830	7/1/2018
50	Eden Housing, Inc.	Weinreb Place	Hayward	24	\$12,351	\$11,951	\$11,951	12/15/2017
51	Eden Housing, Inc.	Wexford Way	Dublin	416	\$12,880	\$12,480	\$12,480	7/1/2018
52	Episcopal Community Services of San Francisco	Bishop Swing Community House	San Francisco	135	\$49,959	\$41,612	\$41,612	6/30/2018
53	Episcopal Community Services of San Francisco	Canon Barcus Community House	San Francisco	153	\$49,520	\$35,547	\$35,547	6/30/2018
54	Episcopal Community Services of San Francisco	Canon Kip Community House	San Francisco	103	\$49,593	\$36,092	\$36,092	6/30/2018
55	First Community Housing	Betty Ann Gardens	San Jose	230	\$38,910			5/3/2020
56	First Community Housing	Casa Feliz Studios	San Jose	60	\$36,700			5/3/2020
57	First Community Housing	Creekview inn	San Jose	25	\$19,705			5/3/2020
58	First Community Housing	Curtner Studios Digital Connections	San Jose	200	\$25,756		\$22,712	3/10/2017
59	First Community Housing	El Paseo Digital Connections	San Jose	98	\$21,030		\$20,350	3/10/2017
60	First Community Housing	Fourth Street Apts	San Jose	250	\$38,910			5/3/2020
61	First Community Housing	Japantown Senior Apts	San Jose	85	\$36,700			5/3/2020
62	First Community Housing	Orchard Parkview	Sunnyvale	130	\$36,700			5/3/2020
63	Housing Authority of the City of Los Angeles	San Fernando Gardens (adoption)	Los Angeles	1692	\$50,000			3/26/2019
64	Housing Authority of the County of Los Angeles (HACoLA)	Camelitos Housing Development	Long Beach	1750	\$28,210	\$13,505	\$19,223	1/31/2018
65	Housing Authority of the County of Los Angeles (HACoLA)	Harbor Hills Housing Development	Lomita	761	\$28,210	\$13,505	\$19,223	1/31/2018
66	Housing Authority of the County of Los Angeles (HACoLA)	Nueva Maravilla Housing Development	Los Angeles	1471	\$28,210	\$13,505	\$19,223	1/31/2018

	RECIPIENT	PROJECT	CITY	RESIDENTS	GRANT AWARD	PAYMENTS 2018	TOTAL PAID	COMPLETION DATE OR EXPECTED
67	Housing Authority of the County of San Bernardino (HACSB)	HACSB Digital Literacy Centers Project	0	2760	\$405,731			9/13/2020
68	Housing Authority of the County of San Bernardino (HACSB)	Maplewood homes	San Bernardino	962	\$42,589			5/6/2020
69	Housing Authority of the County of San Bernardino (HACSB)	Parkside Pines	Colton	324	\$36,519			5/6/2020
70	Jamboree Housing Corporation	Ceres Court Apartments	Fontana	147	\$12,798	\$8,363	\$8,363	9/30/2018
71	Jamboree Housing Corporation	Ceres Way Apartments	Fontana	138	\$11,877	\$9,638	\$9,638	9/30/2018
72	Jamboree Housing Corporation	Puerto del Sol Apartments	Long Beach	498	\$23,567	\$2,734	\$12,483	8/31/2017
73	Jamboree Housing Corporation	Woodglen Vista Apartments	Santee	432	\$10,677	\$10,637	\$10,637	9/30/2018
74	Long Beach Affordable Housing Coalition (LBAHC)	Grace Manor	Cars on	100	\$25,007			11/30/2019
75	Long Beach Affordable Housing Coalition (LBAHC)	Metro West Apts	Los Angeles	67	\$25,347			11/30/2019
76	Long Beach Affordable Housing Coalition (LBAHC)	West Park	Los Angeles	196	\$34,561			11/30/2019
77	Mutual Housing California	Glen Ellen Mutual Housing Community	Sacramento	96	\$34,250			4/15/2019
78	Mutual Housing California	Lemon Hill	Sacramento	282	\$42,058	\$25,118	\$25,118	8/31/2018
79	Mutual Housing California	Moore Village Mutual Housing Community	Davis	154	\$41,700			4/15/2019
80	Mutual Housing California	Mutual Housing at Dixianne	Sacramento	184	\$40,500			4/15/2019
81	Mutual Housing California	Mutual Housing at Norwood	Sacramento	305	\$49,848			4/15/2019
82	Mutual Housing California	Mutual Housing at River Garden	Sacramento	581	\$48,898			4/15/2019
83	Mutual Housing California	Mutual Housing at Sky Park	Sacramento	258	\$44,289	\$27,997	\$27,997	8/31/2018
84	Mutual Housing California	Mutual Housing at Spring Lake	Woodland	335	\$35,960	\$24,763	\$24,763	8/31/2018
85	Mutual Housing California	Mutual Housing at the Highlands	North Highlands	141	\$49,533	\$31,964	\$31,964	8/31/2018
86	Mutual Housing California	Mutual Housing on the Greenway	Sacramento	168	\$40,100			4/15/2019
87	Mutual Housing California	New Harmony	Davis	195	\$38,122	\$26,251	\$26,251	8/31/2018
88	Mutual Housing California	Owendale	Davis	91	\$25,670	\$19,722	\$19,722	8/31/2018
89	Mutual Housing California	Tremont Green Mutual Housing Community	Davis	94	\$34,650			4/15/2019
90	Mutual Housing California	Twin Pines Mutual Housing Community	Davis	80	\$34,900			4/15/2019
91	Mutual Housing California	Victory Townhomes Mutual Housing	Sacramento	70	\$30,250			4/15/2019
92	Neighborhood Housing Services of Orange County dba NeighborWorks Orange County	Computer Lab and Digital Literacy Classes at Walnut Village Apartments	Brea	153	\$39,695			5/31/2019

	RECIPIENT	PROJECT	CITY	RESIDENTS	GRANT AWARD	PAYMENTS 2018	TOTAL PAID	COMPLETION DATE OR EXPECTED
93	Oakland Housing Authority	Lockwood Learning Center	Oakland	804	\$98,495			1/26/2020
94	Peoples' Self-Help Housing	Ocean View Manor	Morro Bay	40	\$13,575			10/24/2019
95	Peoples' Self-Help Housing	Oceanside Gardens	Morro Bay	21	\$7,883			10/24/2019
96	Petaluma Ecumenical Properties (PEP Housing)	575 Vallejo Street Senior Apartments Adoption	Petaluma	46	\$10,550		\$7,023	11/9/2016
97	Petaluma Ecumenical Properties (PEP Housing)	579 Vallejo Street Senior Apartments Adoption	Petaluma	41	\$9,430		\$6,271	11/10/2016
98	Petaluma Ecumenical Properties (PEP Housing)	Acacia Lane Senior Apartments Adoption	Santa Rosa	47	\$10,190		\$6,772	11/3/2016
99	Petaluma Ecumenical Properties (PEP Housing)	Casa Grande Senior Apartments Adoption	Petaluma	60	\$13,350		\$9,030	11/17/2016
100	Petaluma Ecumenical Properties (PEP Housing)	Caulfield Lane Senior Apartments Adoption	Petaluma	23	\$5,220		\$3,512	11/18/2016
101	Petaluma Ecumenical Properties (PEP Housing)	Kellgren Senior Apartments Adoption	Petaluma	53	\$11,650		\$7,776	11/4/2016
102	San Francisco Housing Development Corporation	Bayview Commons	San Francisco	61	\$23,716			10/24/2019
103	San Francisco Housing Development Corporation	Hunters Point East	San Francisco	350	\$50,000			10/24/2019
104	San Francisco Housing Development Corporation	Hunters Point West	San Francisco	496	\$49,265			10/24/2019
105	San Francisco Housing Development Corporation	Westbrook	San Francisco	681	\$50,000			10/24/2019
106	Satellite Affordable Housing Associates	Amistad House	Berkeley	63	\$48,290	\$47,875	\$47,875	10/30/2018
107	Satellite Affordable Housing Associates	Arboleda Apartments Adoption	Walnut Creek	92	\$40,756		\$40,756	6/30/2017
108	Satellite Affordable Housing Associates	Beth Asher	Oakland	53	\$37,260			12/26/2019
109	Satellite Affordable Housing Associates	Columbia Park Manor	Pittsburg	87	\$41,930			12/26/2019
110	Satellite Affordable Housing Associates	Lakeside Senior Apartments	Oakland	118	\$46,360			12/26/2019
111	Satellite Affordable Housing Associates	Lawrence Moore Manor	Berkeley	50	\$34,125			12/26/2019
112	Satellite Affordable Housing Associates	Linda Glen	Oakland	44	\$31,560			12/26/2019
113	Satellite Affordable Housing Associates	Merritt Crossing Adoption	Oakland	95	\$50,000		\$48,535	9/24/2017
114	Satellite Affordable Housing Associates	Orchards Senior Homes	Oakland	67	\$34,230			12/26/2019
115	Satellite Affordable Housing Associates	Petaluma Avenue Homes	Sebastapol	99	\$48,350	\$48,054	\$48,054	8/30/2018
116	Satellite Affordable Housing Associates	Sacramento Senior Homes	Berkeley	41	\$30,150			12/26/2019
117	Satellite Affordable Housing Associates	Satellite Central	Oakland	196	\$50,000	\$49,807	\$49,807	8/30/2018
118	Satellite Affordable Housing Associates	Strawberry Creek Lodge Adoption	Berkeley	150	\$49,970		\$49,679	9/24/2017
119	Satellite Affordable Housing Associates	Stuart Pratt Manor	Berkeley	47	\$27,910			12/26/2019
120	Satellite Affordable Housing Associates	Valdez Plaza	Oakland	194	\$50,000	\$48,547	\$48,547	8/30/2018

	RECIPIENT	PROJECT	CITY	RESIDENTS	GRANT AWARD	PAYMENTS 2018	TOTAL PAID	COMPLETION DATE OR EXPECTED
121	Silvercrest, Inc. (non-profit)	Parc Grove Commons	Fresno	559	\$38,894	\$10,806	\$20,806	12/5/2017
122	Silvercrest, Inc. (non-profit)	Parc Grove Northwest	Fresno	381	\$38,894	\$6,161	\$16,161	12/5/2017
123	Silvercrest, Inc. (non-profit)	Viking Village	Fresno	121	\$38,894	\$8,504	\$18,504	12/5/2017
124	Tabernacle Community Development Corporation	Robert B Pitts Residences	San Francisco	203	\$49,400			4/20/2020
125	WARD Economic Development Corporation	Rosa Parks Villas	Los Angeles	75	\$23,746			6/21/2020
126	WARD Economic Development Corporation	Tuelyn Terrace	Los Angeles	85	\$26,820			6/21/2020
127	WARD Economic Development Corporation	Ward Villas	Los Angeles	140	\$43,733			6/21/2020
128	West Sacramento Housing Development Corporation	Patio Apartments	West Sacramento	56	\$26,140	\$8,695	\$12,918	12/21/2017
129	West Sacramento Housing Development Corporation	Washington Courtyards	West Sacramento	279	\$45,760	\$15,480	\$27,095	7/16/2019
130	West Sacramento Housing Development Corporation	West Capitol Courtyards	West Sacramento	155	\$49,984	\$16,186	\$27,904	7/16/2019
GRANT TOTAL				30,497	\$4,764,013	\$993,252	\$1,300,128	

Attachment D: Wireline & Fixed Wireless Served Status by County

		STATE of CALIFORNIA Wireline + Fixed Wireless Broadband Deployment					
As of December 31, 2017							
County	All Households (CA DOF 1/1/2018)	Served Households (Speeds are at least 6 Mbps down AND 1 Mbps up)		Unserved Households with Slow Service (Speeds less than 6 Mbps down OR 1 Mbps up)		Unserved Households with No Service (Speeds less than 200 Kbps in both directions, or no service ²)	
		Number	Percent	Number	Percent	Number	Percent
California	13,113,840	12,649,621	96.5 %	92,128	0.7 %	372,091	2.8 %
Alameda	577,123	565,550	98.0 %	746	0.1 %	10,827	1.9 %
Alpine	477	338	70.9 %	25	5.2 %	114	23.9 %
Amador	14,685	12,478	85.0 %	1,402	9.5 %	805	5.5 %
Butte	90,962	87,991	96.7 %	585	0.6 %	2,386	2.6 %
Calaveras	18,290	16,309	89.2 %	520	2.8 %	1,461	8.0 %
Colusa	7,311	6,136	83.9 %	30	0.4 %	1,145	15.7 %
Contra Costa	392,185	385,855	98.4 %	528	0.1 %	5,802	1.5 %
Del Norte	9,743	8,666	88.9 %	1	0.0 %	1,076	11.0 %
El Dorado	74,265	68,173	91.8 %	1,413	1.9 %	4,679	6.3 %
Fresno	308,269	290,265	94.2 %	8,277	2.7 %	9,727	3.2 %
Glenn	10,098	8,363	82.8 %	492	4.9 %	1,243	12.3 %
Humboldt	56,939	52,229	91.7 %	584	1.0 %	4,126	7.2 %
Imperial	50,091	42,893	85.6 %	2,322	4.6 %	4,876	9.7 %
Inyo	8,094	6,302	77.9 %	14	0.2 %	1,778	22.0 %
Kern	270,224	256,873	95.1 %	1,220	0.5 %	12,131	4.5 %
Kings	43,877	37,973	86.5 %	2,352	5.4 %	3,552	8.1 %
Lake	24,594	19,509	79.3 %	2,326	9.5 %	2,759	11.2 %
Lassen	9,631	8,172	84.9 %	76	0.8 %	1,383	14.4 %
Los Angeles	3,338,658	3,296,203	98.7 %	2,441	0.1 %	40,014	1.2 %
Madera	45,217	42,464	93.9 %	241	0.5 %	2,512	5.6 %
Marin	104,591	102,055	97.6 %	472	0.5 %	2,064	2.0 %
Mariposa	7,799	6,676	85.6 %	125	1.6 %	998	12.8 %
Mendocino	35,317	26,051	73.8 %	832	2.4 %	8,434	23.9 %
Merced	80,044	73,586	91.9 %	2,912	3.6 %	3,546	4.4 %
Modoc	3,859	2,506	64.9 %	56	1.5 %	1,297	33.6 %
Mono	5,647	4,300	76.1 %	32	0.6 %	1,315	23.3 %
Monterey	126,339	113,017	89.5 %	7,315	5.8 %	6,007	4.8 %
Napa	49,281	47,948	97.3 %	187	0.4 %	1,146	2.3 %

Sources:
Broadband deployment data collected from Internet Service Providers and validated by the California Public Utilities Commission. The CPUC defines "broadband service" as Internet connectivity with download / upload speeds of at least 200 Kbps in one direction. Such service is considered "available" if the provider can provision new requests for service within 10 business days.
Household data is based on the California Department of Finance, January 1, 2018 estimate.
²Dial-up only service is included in the "No Service" category.



STATE of CALIFORNIA
Wireline + Fixed Wireless Broadband
Deployment

Maximum Advertised Speeds
 As of December 31, 2017

County	All Households (CA DOF 1/1/2018)	Served Households (Speeds are at least 6 Mbps down AND 1 Mbps up)		Unserved Households with Slow Service (Speeds less than 6 Mbps down OR 1 Mbps up)		Unserved Households with No Service (Speeds less than 200 Kbps in both directions, or no service ²)	
		Number	Percent	Number	Percent	Number	Percent
Nevada	41,647	38,644	92.8 %	1,015	2.4 %	1,988	4.8 %
Orange	1,037,173	988,506	95.3 %	7,889	0.8 %	40,778	3.9 %
Placer	144,074	137,495	95.4 %	2,433	1.7 %	4,146	2.9 %
Plumas	8,570	7,800	91.0 %	34	0.4 %	736	8.6 %
Riverside	729,920	701,328	96.1 %	1,683	0.2 %	26,909	3.7 %
Sacramento	537,056	525,940	97.9 %	3,138	0.6 %	7,978	1.5 %
San Benito	17,830	17,080	95.8 %	95	0.5 %	655	3.7 %
San Bernardino	644,247	617,048	95.8 %	6,698	1.0 %	20,501	3.2 %
San Diego	1,139,651	1,092,675	95.9 %	4,806	0.4 %	42,170	3.7 %
San Francisco	368,186	366,821	99.6 %	32	0.0 %	1,333	0.4 %
San Joaquin	228,200	219,854	96.3 %	1,452	0.6 %	6,894	3.0 %
San Luis Obispo	107,256	97,083	90.5 %	4,105	3.8 %	6,068	5.7 %
San Mateo	265,011	262,667	99.1 %	403	0.2 %	1,941	0.7 %
Santa Barbara	148,865	144,550	97.1 %	251	0.2 %	4,064	2.7 %
Santa Clara	642,093	624,081	97.2 %	657	0.1 %	17,355	2.7 %
Santa Cruz	96,860	93,386	96.4 %	411	0.4 %	3,063	3.2 %
Shasta	72,331	65,001	89.9 %	3,056	4.2 %	4,274	5.9 %
Sierra	1,394	686	49.2 %	146	10.5 %	562	40.3 %
Siskiyou	19,369	15,182	78.4 %	786	4.1 %	3,401	17.6 %
Solano	148,678	144,459	97.2 %	165	0.1 %	4,054	2.7 %
Sonoma	186,676	180,391	96.6 %	1,169	0.6 %	5,116	2.7 %
Stanislaus	169,032	163,239	96.6 %	1,701	1.0 %	4,092	2.4 %
Sutter	32,209	30,849	95.8 %	371	1.2 %	989	3.1 %
Tehama	24,647	20,716	84.1 %	1,787	7.3 %	2,144	8.7 %
Trinity	5,994	3,739	62.4 %	133	2.2 %	2,122	35.4 %
Tulare	137,814	121,328	88.0 %	7,322	5.3 %	9,164	6.6 %
Tuolumne	22,189	19,912	89.7 %	307	1.4 %	1,970	8.9 %
Ventura	273,672	266,009	97.2 %	1,487	0.5 %	6,176	2.3 %
Yolo	73,629	69,905	94.9 %	577	0.8 %	3,147	4.3 %
Yuba	25,957	24,366	93.9 %	493	1.9 %	1,098	4.2 %

Sources:
 Broadband deployment data collected from Internet Service Providers and validated by the California Public Utilities Commission. The CPUC defines "broadband service" as Internet connectivity with download / upload speeds of at least 200 Kbps in one direction. Such service is considered "available" if the provider can provision new requests for service within 10 business days.
 Household data is based on the California Department of Finance, January 1, 2018 estimate.

²Dial-up only service is included in the "No Service" category.

Attachment E: Household Adoption by County

		STATE of CALIFORNIA Fixed Broadband Adoption As of December 31, 2017		
County	Households	Households Offered Broadband Internet Access Service	Consumer Connections	Broadband Adoption Rate
California	13,113,840	12,741,752	11,127,717	87.3%
Alameda	577,123	566,295	503,803	89.0%
Alpine	477	363	547	150.8%
Amador	14,685	13,881	12,417	89.5%
Butte	90,962	88,577	70,937	80.1%
Calaveras	18,290	16,829	17,242	102.5%
Colusa	7,311	6,166	1,613	26.2%
Contra Costa	392,185	386,384	363,807	94.2%
Del Norte	9,743	8,667	6,777	78.2%
El Dorado	74,265	69,586	61,706	88.7%
Fresno	308,269	298,542	235,474	78.9%
Glenn	10,098	8,855	5,840	65.9%
Humboldt	56,939	52,813	41,239	78.1%
Imperial	50,091	45,215	34,546	76.4%
Inyo	8,094	6,316	5,763	91.2%
Kern	270,224	258,093	204,708	79.3%
Kings	43,877	40,325	31,024	76.9%
Lake	24,594	21,834	18,508	84.8%
Lassen	9,631	8,249	1,295	15.7%
Los Angeles	3,338,658	3,298,645	2,759,298	83.6%
Madera	45,217	42,704	32,618	76.4%
Marin	104,591	102,527	95,659	93.3%
Mariposa	7,799	6,800	5,744	84.5%
Mendocino	35,317	26,883	20,501	76.3%
Merced	80,044	76,498	57,237	74.8%
Modoc	3,859	2,562	748	29.2%
Mono	5,647	4,332	6,381	147.3%
Monterey	126,339	120,332	102,831	85.5%
Napa	49,281	48,135	43,735	90.9%

Sources: CPUC broadband data collection as of December 2017; household information are based on the California Department of Finance, January, 1 2018 estimate. Broadband internet access service is assumed to be deployed to all households in census blocks where at least one household is offered service at speeds exceeding 200 Kbps in at least one direction. Broadband Adoption Rate is defined as the percentage of consumer fixed internet access connections over the total households offered Broadband internet access service.



STATE of CALIFORNIA
Fixed Broadband Adoption
 As of December 31, 2017

County	Households	Households Offered Broadband Internet Access Service	Consumer Connections	Broadband Adoption Rate
Nevada	41,647	39,659	37,547	94.7%
Orange	1,037,173	996,395	932,569	93.6%
Placer	144,074	139,928	131,105	93.7%
Plumas	8,570	7,834	4,258	54.4%
Riverside	729,920	703,011	655,516	93.2%
Sacramento	537,056	529,078	467,341	88.3%
San Benito	17,830	17,175	14,243	82.9%
San Bernardino	644,247	623,746	545,421	87.4%
San Diego	1,139,651	1,097,482	1,013,011	92.3%
San Francisco	368,186	366,853	314,435	85.7%
San Joaquin	228,200	221,306	183,881	83.1%
San Luis Obispo	107,256	101,188	89,340	88.3%
San Mateo	265,011	263,070	254,295	96.7%
Santa Barbara	148,865	144,801	126,036	87.0%
Santa Clara	642,093	624,738	573,799	91.8%
Santa Cruz	96,860	93,797	83,563	89.1%
Shasta	72,331	68,058	46,698	68.6%
Sierra	1,394	831	772	92.9%
Siskiyou	19,369	15,968	11,032	69.1%
Solano	148,678	144,624	131,491	90.9%
Sonoma	186,676	181,560	159,585	87.9%
Stanislaus	169,032	164,940	134,111	81.3%
Sutter	32,209	31,220	25,570	81.9%
Tehama	24,647	22,503	14,424	64.1%
Trinity	5,994	3,873	2,202	56.9%
Tulare	137,814	128,650	92,183	71.7%
Tuolumne	22,189	20,219	16,523	81.7%
Ventura	273,672	267,496	245,522	91.8%
Yolo	73,629	70,482	60,506	85.8%
Yuba	25,957	24,859	18,740	75.4%

Sources: CPUC broadband data collection as of December 2017; household information are based on the California Department of Finance, January, 1 2018 estimate. Broadband internet access service is assumed to be deployed to all households in census blocks where at least one household is offered service at speeds exceeding 200 Kbps in at least one direction. Broadband Adoption Rate is defined as the percentage of consumer fixed internet access

**State Controller's Office
Division of Audits
Post Office Box 942850
Sacramento, CA 94250**

<http://www.sco.ca.gov>